Participants

145 participants for JoTTO Fair 2023.

3DNextech

Company

Country Italy

City Livorno

Street

Web https://www.3dnextech.com/



Contact

Name Giulia Giannone

Role R&D specialist



Description

3DNextech S.r.l., società spin-off della Scuola Superiore Sant'Anna di Pisa, è stata fondata nel settembre 2015 con l'obiettivo di sviluppare, produrre e commercializzare una gamma di prodotti legati alla manifattura digitale. Il team è composto da persone appassionate di innovazione e unite da una forte missione sociale, ovvero di migliorare la tecnologia per avere un impatto positivo sulla società. La missione di 3DNextech è quella di portare una rivoluzione nel mondo della manifattura additiva, creando prodotti e tecnologie legate alla fabbricazione digitale e alla stampa 3D, per consentire alle piccole e grandi aziende di produrre manufatti plastici in loco, riducendo i costi e l'impatto ambientale. In questo modo, le aziende che utilizzano queste tecnologie possono migliorare i propri processi di produzione e passare da un concetto di "produzione di massa" a una "personalizzazione di massa".

- · Green Economy
- Additive Manufacturing

- · Mechanics and new materials
- · Robotics and Biorobotics

3DNextech SRL

Company

Country Italy

City Livorno

Street Via Cairoli 21

Web https://www.3dnextech.com/



Contact

Name Natalia Barresi

Role Operation



Description

3DNextech S.r.l., una spin-off della Scuola Superiore Sant'Anna di Pisa, è stata fondata nel settembre 2015 per sviluppare, produrre e commercializzare una gamma di prodotti legati alla manifattura digitale. Il team è composto da persone appassionate di innovazione e unite da una forte missione sociale, ovvero quella di migliorare la tecnologia per un impatto positivo sulla società. La missione di 3DNextech è quella di portare una rivoluzione nel mondo della manifattura additiva creando prodotti e tecnologie per la fabbricazione digitale, la manifattura additiva e la stampa 3D, che consentono alle aziende di produrre i propri componenti in loco, riducendo i costi e l'impatto ambientale. La tecnologia di 3DNextech consente alle aziende di passare da un concetto di produzione di massa a una personalizzazione di massa.

Areas of Activity

· Additive Manufacturing

A11 Venture

Investor

Country Italy

City Lucca

Street Viale G. Carducci 407

Web https://www.a11venture.it

Contact

Name Federico Davini

Role Partner and Investment Manager



Description

A11-Venture investe nel capitale di startup innovative.

Facilita la nascita e lo sviluppo di business innovativi globali per il futuro dell'economia locale. Contribuisce a costruire aziende, lavoro qualificato, brevetti, innovazione capaci di rilanciare e riportare investimenti e risorse sul territorio. I soci di A11 Venture credono fermamente nell'innovazione grazie a ciò è possibile crescere per linee esterne diversificando i propri investimenti, grazie ad un portafoglio di imprese, con una forte risk mitigation derivante dalla gestione professionale di tutti processi: scouting, team building, investimenti, management degli investimenti, accelerazione e disinvestimento.

I soci e i mentor sono protagonisti orientati a dare sostegno alla crescita delle startup affiancandole in uno scenario antagonista in cui è difficile essere leader e guidare l'innovazione con un focus market oriented pronti a cambiare modello di business con risorse scarse. A11 Venture guiderà le start up con metodo e competenze per uscire dall'ombra con l'esperienza, la visione, l'approccio al mercato essenziali per creare valore e innovazione.

- High Performance Computing (HPC)
- Information and communication technology (ICT)
- · Additive Manufacturing
- · Green Science
- · Robotics and Biorobotics
- Quantum Technologies

- Big Data and Quantum Computing
- · Green Economy
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Nanotechnologies
- Artificial Intelligence (AI)

A11 Venture srl

Investor

Country Italy

City Lucca

Street Viale G. Carducci, 407

Web http://www.a11venture.it



Contact

Name giovanni Polidori

Role Patner e investment manager



Description

Holding di partecipazioni in start up innovative

- Artificial Intelligence (AI)
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Additive Manufacturing

- Mechanics and new materials
- Nanotechnologies
- Robotics and Biorobotics

ABITARE SRL

Company

Country Italy

City San Gimignano

Street Via del Ponte 6, Z.I. Badia a Elmi ingresso 2

Web http://abitarecornici.it



Contact

Name Andrea Scali

Role direttore generale



Description

Creazione e distribuzione di cornici in asta di legno per quadri, produciamo il semilavorato in legno da adattare al soggetto, foto, tela o altro.

Il nostro prodotto è esportato principalmente in Europa e Stati Uniti. Presente in molte foto di personaggi illustri.

Areas of Activity

- Agricultural Science
- Green Economy

• Green Science

Marketplace Opportunities

PROJECT COOPERATION

La cornice in laboratorio

In un mondo in cui il legno, l'albero, ma soprattutto le foreste sono diventate fondamentali per la salvaguardia del genere umano sentiamo l'esigenza di sostituire il legno come supporto nella lavorazione delle cornici per quadri.

Abstraqt Srl

Company

Country Italy

City Lucca

Street Viale Giacomo Puccini, 311/b

Web http://www.abstraqt.it



Contact

Name Andrea Bicocchi

Role CEO



Description

Abstraqt is a software company that works on large Central Public Administrations projects. Also we develop

- Artificial Intelligence (AI)
- Big Data and Quantum Computing
- High Performance Computing (HPC)
- Information and communication technology (ICT)

ACN

Company

Country Italy

City Lucca

Street Via Romana Ovest

Web https://www.acelli.it

Contact

Name Fernando Barsacchi

Role R&D Manager

Description

Nonwovens Machine manufacturer

Areas of Activity

• Additive Manufacturing

Advanced Microwave Engineering Srl.

Company

Country Italy

City firenze

Street Via Lucca 44

Web http://www.ameol.it



Contact

Name ELISA CISBANI

Role Marketing

Description

Advanced Microwave Engineering (AME) is a hi-tech company headquartered in Florence. Since 1999 it has been creating, developing and implementing Safety and Security solutions for the industrial, logistics, tunneling, and construction sectors.

Thanks to its futuristic vision and continuous innovation, AME has become a real leader in the field of active safety, exporting its products all over the world.

The company aims to create technological innovation to protect the operator and bring the concept of active prevention in all types of working environments, through the values of innovation, excellence and partnership that are the foundation on which the company's philosophy is built.

Areas of Activity

- Artificial Intelligence (AI)
- Big Data and Quantum Computing

Information and communication technology (ICT)

Aerospazio Tecnologie

Company

Country Italy

City Livorno

Street



Contact

Name Federico Dini

Role Project Manager



Description

Eurpean leader in the domains of Electric Space Propulsion and Thermo Vacuum Test services. Extensive R&D activities in avionics, pPhotonics and space technologies, with particular focus on electric propulsion subsystems and ground support equipment.

Four sites located in Rapolano Terme and R&D site located in Guasticce - Interporto Toscano

- · Additive Manufacturing
- Mechanics and new materials

- Space economy
- · Space Tech

Aerospazio Tecnologie

Company

Country Italy

City Siena

Street Strada comunale di Ficaiole, km 0,6

Web http://www.aerospazio.com



Contact

Name Francesco Petroni

Role Responsabile dell'area di Business "Sistemi elettronici di bordo

satellitari"



Description

Eurpean leader in the domains of Electric Space Propulsion and Thermo Vacuum Test services. Extensive R&D activities in Avionics and Photonics.

Four sites located in Rapolano Terme and R&D site located in Guasticce - Interporto Toscano

- Quantum Technologies
- Photonics
- Nanotechnologies

- Space economy
- Space Tech

Aerospazio Tecnologie

Company

Country Italy

City Rapolano Terme

Street

Contact

Name Marco Presi



Description

Aerospazio Tecnologie srl is a privately owned company which provides engineering services for the Aerospace Industry.

Aerospazio Tecnologie is the European leader in the field of qualification and testing of Electrical Propulsion Systems for Satellite platforms.

Aerospazio Tecnolgie fully owns Mars Space (UK) which manufacturers Gridded-Ion Engines. Recently Aerospazio Tecnologie started an internal R&D program on photonic technologies for space applications, which range from the development of thurster diagnostic systems based on spectroscopy to the telecom applications

- Photonics
- Information and communication technology (ICT)
- Additive Manufacturing

- · Mechanics and new materials
- · Space Tech

Akkodis

Company

Country Italy

City Turin

Street Corso Tazzoli 215/12B

Web https://www.akkodis.com/



Contact

Name Manuel Di Frangia

Role EU Research & Innovation Funded Program Manager



Description

AKKODIS, born from the merger between AKKA Technologies and MODIS Consulting, in March 2022, is the new global reality of engineering and digital solutions able to meet the needs of customers all over the world and seize the opportunities generated by the rapidly expanding sector such as that of the Smart Industry, where IT and engineering technologies converge in a digital and connected world. The new reality intends to position itself in the engineering and digital sectors with 50,000 engineers and tech experts.

- Big Data and Quantum Computing
- High Performance Computing (HPC)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Microelectronics
- · Robotics and Biorobotics
- Space economy
- Artificial Intelligence (AI)

- · Green Economy
- Information and communication technology (ICT)
- Additive Manufacturing
- · Mechanics and new materials
- Agricultural Science
- Space Tech

APICOM

Consultant

Country Italy

City firenze

Street

Web http://WWW.APICOM.IT

Contact

Name bruno lo cicero

Role president

Description

Apicom è l'associazione toscana dei professionisti della comunicazione

- Artificial Intelligence (AI)
- Information and communication technology (ICT)
- Social and Human Sciences

Arturo BAroncelli

Consultant

Country Italy

City Caraglio

Street Via Momigliano 3

Contact

Name Arturo Baroncelli

Role Owner



Description

Consultancy

Areas of Activity

- Artificial Intelligence (AI)
- Additive Manufacturing

• Robotics and Biorobotics

AurorA Science

Investor

Country Italy

City Milano

Street Via Pontaccio 14

Web http://www.aurorascience.eu

AurorA Science

Contact

Name Edoardo Negroni Role Managing Partner



Description

AurorA Science (www.aurorascience.eu) is a biotech investment company integrating an innovative financial and industrial approach in the research and development challenge. The company is focused on independent and entrepreneurial biotech start-ups in Europe with high therapeutic potential, providing industrial and financial support.

AurorA Science is actively seeking investment opportunities exclusively in Europe in biotech, typically between seed stage and series B, within financing rounds between 3 and 20 M\$ with tickets between 1 and 5 M\$. Preferred development stages are between preclinical and phase I clinical.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

BEIA

Company

Country Belgium

City Brussels

Street Rue Montoyer 23/4et

Web https://www.beia.eu



Contact

Name George Suciu

Role R&D and Innovation Manager



Description

BEIA is a R&D performing SME, and one of the leading providers of ICT solutions and services in the Balkan/Danube region for cloud communications and IoT telemetry. The company's references include over 5,000 turn-key projects for advanced IT and communications solutions. BEIA is certified ISO 9001, 14001, 18001 and 27001.

We are active in the following domains:

- service innovation (AI, blockchain, cloud, big data, quantum, etc.)
- hardware (sensors, actuators, IIoT, IoMT, etc.)
- information technologies (data analytics, processing back end, interfaces, front end)
- integration (software/hardware), communication technologies (speech processing, chatbots, ASR/TTS, NLP/NLU, AI, sentiment analysis, emotional computing, contact centers, tele-systems)
- learning & training, standardization, communication / dissemination / marketing, business development, consultancy, project management.

BEIA has implemented and integrated IoT telemetry applications in the field of

- smart buildings (monitoring HVAC, light, smart power plugs, location based services using beacons, digital signage using ePaper)
- smart city (noise, air quality, mobility)
- e-health (tele-diagnosis, tele-medicine, emergency communication systems for patients, nurses and doctors)
- environment (monitoring of water, soil and air quality)
- hydro energy (tele-monitoring of level and flow)
- solar energy (measurement of solar radiation in photo-voltaic parks, forecasting of energy production according to meteorology sensors, monitoring inverters)
- agriculture (frost warnings, disease alert for plants, evapo-transpiration calculations, measurement of accumulated degree days, aqua/hydroponics, urban farming)
- accurate water data (water sensors for hydrographical purposes, from precipitation to water level monitoring of lakes, rivers, wells)
- efficient water management (leak and burst detection, pressure, flow, level and well monitoring)
- irrigation management (including sensors for measuring soil moisture, monitor water uptake)
- heliports (measurement of meteorological parameters)

- underground (monitoring oil/gas exploration sites, mining tunnels). Some other IoT/Telemetry use cases (including blockchain, AI and quantum security) we are implementing are presented here: http://eng.beia-telemetrie.ro

Geographically, BEIA covers the Balkan/Danube region with offices in Romania, Austria and Belgium, and as fields of activities we target ICT solutions in the following domains: local and central administration, cities and municipalities, industry, agriculture, energy sector, environmental protection, public health, education and culture, national defense and intelligence.

BEIA has experience in coordinating and participating in more than 40 R&D and Innovation projects (FP6, FP7, Structural Funds, H2020, ECSEL/Artemis, Eureka, Eurostars, Celtic, ITEA, COST, AAL, ERANEt, Interreg, LIFE+, Erasmus+, MSCA, EaP Twinning, JTIs, etc.). http://www.beia.eu

BEIA has many partnerships and can provide a full sub-consortium, including

- government (cities, regions, national/regional agencies, organisations of municipalities, public transport companies, etc.)
- industry/large enterprises (DSO, SG/RES/ESS, EV/PV stakeholders, etc.)
- critical infrastructure operators "CI" (telecom, financial, food, renewable energy, water, nuclear, metro/railway/road transport, chemical industry, RI, etc.)
- first responder organizations "FRO" (firefighters, ambulance, red cross, volunteer organizations, SMURD, forensic investigators, crime scene investigators, CERT/CSIRT, etc.)
- law enforcement agencies "LEA" (police, border guard, customs, environmental guard, coast guard, ports administration, STS, SPP, SRI, other authorities from the Ministry of Interior, Ministry of Defense, etc.)
- NGO, SMEs, academia and research organizations such as University "Politehnica" of Bucharest (UPB), Research Institute for Artificial Intelligence / Romanian Academy (RACAI), Romanian Space Agency (ROSA), National Institute for Research and Development in Electrical Engineering (ICPE-CA), National Institute of Aerospace Research "ELIE CARAFOLI" (INCAS), National Institute for Research and Development in Informatics (ICI), Institute for Research and Development in Automation (IPA), The Romanian Academy –"Stefan S. Nicolau" Institute of Virology, University of Medicine and Pharmacy "Carol Davila" Bucharest, Research and Development Institute for Industrializing and Marketing Horticulture Products "HORTING", National Institute for Research and Development in Microbiology and Immunology for the Military "Cantacuzino", TU Wien, JOANNEUM, AIT, BOKU, WU Wien, University of Tuebingen (EKUT), Alpen-Adria-Universität Klagenfurt (AAUK), RSAFG, SIRRIS, KU LEUVEN, etc.

Contact details:

Mobile: +40744914798 Skype: george_suciu E-mail: george@beia.eu

LinkedIn: https://www.linkedin.com/in/georgesuciu

- Big Data and Quantum Computing
- Space economy
- Artificial Intelligence (AI)
- Cultural heritage
- Photonics
- Information and communication technology (ICT)

- Agricultural Science
- Space Tech
- Quantum Technologies
- · Green Economy
- High Performance Computing (HPC)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

- Soft Matter
- Robotics and Biorobotics

Microelectronics

bigcap

Freelancer

Country Italy

City firenze

Street via francavilla 10

Web http://www.bigcap.it

Contact

Name bruno lo cicero

Role president



Description

marketing and communication consultancy

Areas of Activity

· Social and Human Sciences

Bio@SNS -Intrabody Lab

University

Country Italy

City Pisa

Street

Web https://laboratoriobiologia.sns.it/?page_id=5949



Contact

Name Gabriele Ugolini



Description

The scientific focus of the research at Bio@SNS (Biology Laboratory of the Scuola Normale Superiore) is the study of the brain, and of its functions and mechanisms during development, adulthood and ageing. The research proceeds in two main directions: the focus on Neurobiology and Neuroscience (studies with a long tradition at the SNS) is completed and integrated with new scientific programmes that study the molecular and cellular bases of neuronal development, the biology of stem cells, neurodegeneration and ageing.

The aim of Bio @ SNS (Biology Lab of Scuola Normale Superiore) is to develop and set up cutting edge technologies and experimental strategies in the field of genomics, recombinant antibodies, optogenetics and the genetic incorporation of non natural amino acids, through the expansion of the genetic code, into recombinant proteins of interest.

The specific focus of the Intrabody Lab is represented by recombinant intracellular antibodies (intrabodies). The unique know-how around intrabodies represents one of the three main pillars of an entrepreneurial project, alongside with proprietary (SPLINT) libraries and the patented technology platform called PISA (Post-translational Intracellular Silencing Antibodies).

P.I.S.A. Biotech is the name of the business proposal that originated inside the Bio@SNS Intabody Lab. We develop intracellular antibodies against particular conformations or Post-Translational Modifications (PTM) of (intracellular) proteins. PTMs are responsible for a number of pathologies that cannot be addressed using current technologies, which do not allow to select drugs directed against an individual PTM of the corresponding target protein. PISA intrabodies can be considered as a new class of biopharmaceutical drugs to be delivered as gene therapy products (antibody gene therapy). Our current focus concerns therapeutic intrabodies in the field of neurodegenerative diseases (in particular tauophaties). Our patented technology allows the identification and development of intrabodies targeting and neutralizing their antigens in the intracellular environment, with the possibility to address the early phase of neurodegeneration (intracellular cell-autonomous phase), unlike classical monoclonal antibodies (which, by definition, bind their targets in the extracellular space) .

Anyway, the value of the technology platform goes well beyond such initial therapeutic focus. PISA

antibodies can also be empolyed as novel target validation/diagnostic tools, thanks to their capability of recognising presently undruggable targets.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

INVESTMENT OPPORTUNITY

P.I.S.A. Biotech

P.I.S.A. Biotech is the name of a business proposal that originated from the Intrabody lab of Bio@SNS (the Biology lab of SNS, Scuola Normale Superiore), which we present here to investors (a brief summary of the business proposal can also be found in the attached non-confidential slidedeck).

We are presently going through SNS procedure to be recognized as SNS spinoff. Incorporation might be envisaged by the 3rd quarter of 2023, depending on the implementation of "investor-readiness" activities and the outcome of funding activities.

Our area of activity concerns the development of biotherapeutics based on patented platform and specific knowhow in the field of intracellular antibodies against post-translationally modified (PTM) and conformational targets, and targeted degradation of the disease-relevant targets. The platform is broad, as far as the therapeutic space is concerned. The expertise of the team is strong in the Neurodegeneration therapeutic area. The initial pipeline for such new generation drugs is under evaluation.

Anti-PTM therapeutic antibodies employed as genes represent a class of drugs of the future. In a nutshell, P.I.S.A. Biotech products share four fundamental features: _(i)_ They are directed against a post-translational modification (PTM) or a disease-specific conformation of the target protein; _(ii)_ they are biotherapeutic products, aimed at curing certain diseases by functionally interfering with specific PTMs/conformations that are responsible for the corresponding diseases; _(iii)_ their administration mode is gene therapy (intrabodies = intracellular antibodies)_; (iv)_ the mode of action of the PTM/Conformation-specific intrabodies is either direct neutralization and competition, or targeted protein degradation.

P.I.S.A. Biotech does not intend to directly bring its products to market. The company will develop them up to the end of preclinical development or up to clinical phase 1/2a, when the products will be either sold or licensed out to pharma (or other Biotech) companies, which will bring them to market. These companies are therefore the customers of P.I.S.A. Biotech products. P.I.S.A. Biotech will also exploit its powerful discovery engine to feed the cash flow by means of license-based research agreements with pharma companies, concerning the generation of antibodies or the validation of targets (outside the company therapeutic focus). In fact, the company value goes well beyond its therapeutic focus (neurodegeneration).

Our mission is to find therapies for neurodegenerative diseases, with a molecular and subcellular precision (by targeting the molecular culprit only in the subcellular compartment where it is first generated). In our vision we should become the first company to develop a biologic drug that is directed against an intracellular PTM or conformation-sensitive protein (PTM/conformation-selective subcellular pharmacology). We think we can become a leading company in a _de facto_ completely new field (antibody gene therapy). Since our intrabodies have to be administered as genes (as DNA

by means of viral vectors, but also as RNA), it is for us essential to establish a partnership with a specialized company, in the field of AAV-based therapies, considering that AAV vectors are presently the gold standard in the gene therapy field.

At the moment, the team is composed by Dr. Gabriele Ugolini (CEO), Dr. Simonetta Lisi (CTO), Prof. Antonino Cattaneo (Chair of scientific board and co-founder). The team members share a background that is mainly scientific/technical, we are active in recruiting new expertise with a legal/financial/IP background, to integrate the team.

Bio@SNS -Intrabody Lab

University

Country Italy

City Pisa

Street

Web https://laboratoriobiologia.sns.it/?page_id=5949

SHBIOTECH

Contact

Name Simonetta Lisi

Role Researcher



Description

P.I.S.A. (Post-translational Intracellular Silencing Antibodies) Biotech is a business proposal from Bio@SNS Intabody Lab. We develop anti-post-translational modification (PTM) intracellular antibodies as a new class of biopharmaceutical drugs to be delivered by gene therapy. PTMs are involved in a number of pathologies. Our current focus is developing antibodies directed against neurodegenerative diseases (in particular tauophaties). Our patented technology allows the identification and development of intrabodies targeting and neutralizing their antigens in the intracellular environment, with the possibility to address the early phase of neurodegeneration, and a cost reduction vs classical monoclonal antibodies treatment.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Bitcom

Company

Country Ukraine

City Lviv

Street

Web https://bitcom.systems/



Contact

Name Lidia Shevadzutska

Role Business Analyst



Description

Bitcom is a software development company, based in Ukraine. We build custom web and mobile applications. Bitcom helps companies and individuals, who are at the beginning of their tech startup journey, and need to develop a pilot product. Besides that, we are a team augmentation provider for the companies that already have their core product and need extra hands to improve and upgrade it.

- Space Tech
- Artificial Intelligence (AI)
- Big Data and Quantum Computing
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

BluEnergy Revolution

Company

Country Italy

City Genova

Street Via Greto di Cornigliano

Web http://www.bluenergyrevolution.com



Contact

Name Traverso Alberto Nicola

Role COO



Description

Con BluEnergy Revolution proponiamo soluzioni basate sull'idrogeno verde, prodotto cioè da fonti rinnovabili

Usiamo tecnologie a ridotto impatto riducendo l'uso di materiali inquinanti e critici in favore di sistemi che utilizzano materiali riciclabili

Areas of Activity

· Green Economy

CENTRO DI COMPETENZE 5G

Company

Country Italy

City PRATO

Street

Contact

Name MATTEO POLIMENO

Role INNOVATION MANAGER

Description

Scopo del Centro è favorire il trasferimento tecnologico verso le imprese di soluzioni basate su 5G, intelligenza artificiale e Blockchain. Offrire inoltre uno spazio fisico e le competenze necessarie per sviluppare idee, sperimentare le nuove tecnologie e trasferire le conoscenze acquisite verso le imprese del settore manifatturiero, affinché possano trarre benefici dalle trasformazioni digitali.

- Information and communication technology (ICT)
- · Additive Manufacturing
- · Robotics and Biorobotics

- · Agricultural Science
- Artificial Intelligence (AI)
- Big Data and Quantum Computing

Cryptolight

Company

Country Germany

City Nürnberg

Street Pfrontener Str.

Web https://www.cryptolight.io

Contact

Name Markus Wirth

Role CTO

Description

Cryptolight provides software solutions for accounting of cryptocurrency.

- Artificial Intelligence (AI)
- Information and communication technology (ICT)

Cryptolight

Company

Country Germany

City Nuremberg

Street

Web http://Cryptolight.io

Contact

Name Nina Tauscher

Role Entrepreneur



Description

Blockchain Analytics

- Artificial Intelligence (AI)
- · Green Economy

- Social and Human Sciences
- Soft Matter

Danieli Automation S.p.A.

Company

Country Italy

City Buttrio

Street Via B. Stringher, 4

Web https://www.dca.it/en/

Contact

Name Daniele Venier Role Manager R&D

Description

Danieli Automation mission is to provide process automation and control systems for the metals industry, covering the wide spectrum of Danieli technology, ranging from refining iron ore to processing long and flat products. Furthermore, we design and supply complete electrical distribution systems, up to turnkey solutions for steel industry, with installation engineering based on extensive experience and on the required standards. Additionally, we produce special instruments and sensors, designed and engineered to meet the demands from steel producers for sophisticated controls, quality certification, cost optimization and quick adaptation to the latest technologies. Research and development activities are part of the Company's DNA as demonstrated by the amount of yearly R&D investments and active collaboration with universities institutions end research centers.

Areas of Activity

- Artificial Intelligence (AI)
- Big Data and Quantum Computing

· Robotics and Biorobotics

Deloitte

Company

Country Italy

City Milan

Street

Contact

Name Silvia Cesarini

Role Consultant



Description

Government Grants and Incentives consultancy

- Green Economy
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Green Science
- Mechanics and new materials

- Nanotechnologies
- Agricultural Science
- Artificial Intelligence (AI)

Deloitte Tax&Legal

Milan

Company

Country Italy

Street

City



Contact

Name Vito Marraffa

Role Partner

Description

Deloitte is an international professional services network composed by different functions (including Tax&Legal)

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Artificial Intelligence (AI)

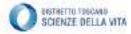
- Green Economy
- Information and communication technology (ICT)

Distretto Toscano Scienze Vita, Fondazione Toscana Life Sciences

Consultant

Country Italy

VIII) (1)



Street

City

Web http://www.scienzedellavita.it

Siena

Contact

Name Francesco Mazzini

Role Cluster Manager



Description

The Tuscany Life Science Cluster mission is to create, mantain and keep growing a productive environment in terms of innovation and business opportunity for all the players of the regional life sciences sector. To this purpose, its actions aims to:

- facilitate networking activities, animation, monitoring, stimulation of collaboration and the creation of partnerships
- facilitate technology transfer and exploitation of research results;
- stimulate and support the creation of innovative start-ups;
- support the creation of a marketplace of ideas;
- simplify the access to regional infrastructure, facilities and expertises for local and extra-regional players
- support internationalization processes;
- dialogue with institutions, at every level, to trasmit the needs of companies within the political and economic development of the sector;

The Cluster gather together all the main regionale stakeholders (more than 190 companies operating in the life science field, as well as all the regional universities and research centers), and it is managed by Fondazione Toscana Life Sciences

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

DITECFER Distretto per le Tecnologie Ferroviarie, l'Alta Velocità e la Sicurezza delle Reti S.c.ar.l

Company

Country Italy

City Pistoia

Street Via Sandro Pertini 358 - Polo Universitario

Web http://www.ditecfer.eu



Contact

Name Veronica Elena Bocci

Role Coordinatore



Description

DITECFER è il Distretto Tecnologico Ferroviario con sede a Pistoia. È il principale d'Italia e uno dei più attivi a livello europeo, con diversi progetti UE coordinati e la Vice-Presidenza di ERCI-European Railway Clusters Initiative.

Composto da 55 Soci (di cui 50 imprese di 7 regioni italiane), i suoi filoni centrali di attività sono Innovazione tecnologica e Internazionalizzazione.

Uno dei progetti UE coordinati e in corso ("STARS") mira a supportare e facilitare l'adozione delle c.d. Tecnologie Avanzate da parte delle PMI operanti nella filiera ferroviaria e della multi-modalità.

- · Additive Manufacturing
- Mechanics and new materials
- Space Tech

- Artificial Intelligence (AI)
- · Big Data and Quantum Computing
- Information and communication technology (ICT)

DITECFER-Distretto per le Tecnologie Ferroviarie, l'Alta Velocità e la Sicurezza delle Reti S.c.ar.l

Company

Country Italy

City Pistoia

Street Via Pertini 358

Web https://www.ditecfer.eu



Contact

Name Guido Ancarani

Role Business development



Description

DITECFER è il Distretto Tecnologico Ferroviario con sede a Pistoia. È il principale d'Italia e uno dei più attivi a livello europeo, con diversi progetti UE coordinati e la Vice-Presidenza di ERCI-European Railway Clusters Initiative.

Composto da 55 Soci (di cui 50 imprese di 7 regioni italiane), i suoi filoni centrali di attività sono Innovazione tecnologica e Internazionalizzazione.

Uno dei progetti UE coordinati e in corso ("STARS") mira a supportare e facilitare l'adozione delle c.d. Tecnologie Avanzate da parte delle PMI operanti nella filiera ferroviaria e della multi-modalità.

- Space Tech
- Artificial Intelligence (AI)
- Big Data and Quantum Computing
- Information and communication technology (ICT)
- Additive Manufacturing
- · Mechanics and new materials

Ecole des Ponts ParisTech

University

Country France

City Champs-sur-Marne

Street 6-8 avenue Blaise-Pascal

Web https://ecoledesponts.fr/en

Contact

Name Alexia Kaffès

Role European Project Manager - EELISA european alliance

Description

École des Ponts ParisTech, created in 1747 under the name École Royale des Ponts et Chaussées, is a higher education establishment that trains engineers to a high level of scientific, technical and general competency. Apart from civil engineering and spatial planning, historically the source of its prestige, the School develops high-quality programs and research associated with the energy transition.

- Green Economy
- · Mechanics and new materials
- Artificial Intelligence (AI)
- Big Data and Quantum Computing

ELFI ELECTRONICS

Company

Country Italy

City PISTOIA

Street

Web https://www.elfisrl.com/en/



Contact

Name Alessandro D'Ambrosio

Role Sales and Marketing Assistant



Description

Elfi Srl nasce nel 2004 a Pistoia come laboratorio di progettazione e produzione di apparecchiature elettroniche per il settore ferrotramviario.

Siamo un'azienda all'avanguardia che produce tecnologia altamente specializzata con qualità industriale, mantenendo nei propri processi la cura di una bottega artigiana: focalizzata sul dettaglio e attenta a trovare soluzioni innovative personalizzate sulle esigenze dei propri clienti.

- Artificial Intelligence (AI)
- Big Data and Quantum Computing
- Information and communication technology (ICT)
- Microelectronics
- · Mechanics and new materials
- · Space Tech

Everel Group

Company

Country Italy

City Valeggio sul Mincio

Street

Contact

Name Ernesto Zamborlin

Description

Produttori di componentistica elettronica ed elettromeccanica per il settore dell'elettrodomestico e dell'automotive

- Microelectronics
- Mechanics and new materials

Extreme Automation Srl

Company

Country Italy

City Lucca

Street Via Romana Ovest, 252, Porcari

Web https://www.extremeautomation.it/



Contact

Name Gerry Tambellini

Role Automation Engineer

Description

Extreme Automation is a company with a focus on R&D and Digitalization projects for industrial machines with a strong background in Nonwovens and Tissue sectors.

- Artificial Intelligence (AI)
- Information and communication technology (ICT)

Extreme Automation srl

Company

Country Italy

City Lucca

Street

Contact

Name Luca Buoni

Description

Extreme Automation is a company focused on R&D and digitalization projects with a strong background on nonwovens and tissue areas

- Information and communication technology (ICT)
- Artificial Intelligence (AI)

FAU Erlangen-Nürnberg, Institute for Factory Automation and Production Systems

University

Country Germany

City Erlangen

Street



Contact

Name Johanna Vogt

Role Research Associate



Description

Research in the field of Factory Automation and Production Systems

- Nanotechnologies
- Robotics and Biorobotics
- Artificial Intelligence (AI)
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Additive Manufacturing
- Microelectronics
- Mechanics and new materials

Friedrich Alexander Universtät

Company

Country Germany
City Erlangen

Street Nägelsbachstraße 27a

Contact

Name Grusha Bharat Anandpara

Role Student



Description

Educational institution

- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Green Science
- Microelectronics

- Nanotechnologies
- Social and Human Sciences
- Artificial Intelligence (AI)
- Big Data and Quantum Computing

Gran Sasso Science Institute

University

Country Italy

City L'Aquila

Street

Contact

Name Catia Trubiani

Role Associate Professor



Description

The Gran Sasso Science Institute (GSSI) is an international PhD school and a center for research and higher education in the areas of Physics, Mathematics, Computer Science and Social Sciences.

Areas of Activity

• Information and communication technology (ICT)

Marketplace Opportunities

PRODUCT

Software Quality

Main research activities:

- * Modelling the quality of software systems
- * Quantitative analysis of critical systems
- * Impact of uncertainties in software architectures
- * Feedback to improve software quality

Haptic R&D Consulting SRL

Company

Country Romania

City Aricestii Rahtivani

Street 414B Aricestii Rahtivani, PH - Romania

Web https://www.haptic.ro/



Contact

Name Daniel CHIRTES

Role CEO



Description

Haptic R&D Consulting SRL is an engineering consultancy company for transfer of technology and business tech audit for innovation.

- Photonics
- Information and communication technology (ICT)
- Green Science
- · Mechanics and new materials
- Artificial Intelligence (AI)

- Green Economy
- Microelectronics
- Nanotechnologies
- Robotics and Biorobotics
- Big Data and Quantum Computing

Hetaweb

Company

Country Italy

City Lucca

Street Via della cavallerizza, 31

Web https://www.hetaweb.it



Contact

Name Edoardo Barcaglioni



Description

Web agency

- Big Data and Quantum Computing
- Information and communication technology (ICT)

Holis

Company

Country France

City Paris

Street

Web https://www.holis.earth



Contact

Name Martin Besnier

Role CEO



Description

Holis is a collaborative LCA platform empowering brands to quantify, improve and communicate the socio-environmental performance of all their products. By blending a didactic interface with AI tools, we enable non-experts to assess their entire catalogue and identify effective eco-design strategies in minutes and for a fraction of the cost. Compliant with regulations, Holis guides its users towards responsible production.

- Green Science
- Artificial Intelligence (AI)

Holis (Druentia SAS)

Company

Country France

City Paris

Street

Web https://holis.earth/



Contact

Name Paul Grédigui

Role CTO



Description

Une plateforme SaaS d'ACV et d'éco-conception permettant aux entreprises de quantifier, d'améliorer et de communiquer les performances socio-environnementales de tous leurs produits et services.

Areas of Activity

- Green Economy
- · Green Science

• Artificial Intelligence (AI)

IMT Lucca

University

Country Italy

City Lucca

Street

Contact

Name Giulio Pappa

Role PhD Student



Description

IMT School PhD program in Management of Digital Transformation.

Research project: "Local Roots and Digital Innovation for the Global Growth of Inner Areas and Urban Ecosystems"

- · Green Economy
- Information and communication technology (ICT)
- Social and Human Sciences

University

Country Italy

City Lucca

Street

Web http://musam.imtlucca.it/

Contact

Name Andrea Mola

Role Assistant Professor



Description

MUSAM is an interdisciplinary research unit integrating computational and experimental mechanics, numerical analysis and materials science to address frontier research related to modelling, simulation and testing of natural and artificial physical systems. Topics of investigation regard fracture mechanics, contact mechanics, fluid dynamics, coupled problems, structural integrity and durability of heterogeneous materials and structures, renewable energy systems and devices

- High Performance Computing (HPC)
- · Mechanics and new materials

University

Country Italy

City Lucca

Street

Web https://www.imtlucca.it/it/angelo.facchini

Contact

Name Angelo Facchini
Role Assistant Professor

Description

Dr. Angelo FACCHINI is Assistant Professor (Tenured) at the IMT School for Advenaced Studies Lucca. He is Associate Scientist at the Institute for Complex Systems Studies of the Italian National Research Council (CNR).

In the period 2003-2009 he visited as Guest Scientist the Max Planck Institute for the Physics of Complex Systems in Dresden.

His research interests are in the field of energy economics, urban sustainability, environmental policy, and complex systems. In the field of energy economics, he works on energy communities, renewable energy sources, electric mobility, market dynamics, policies, and economic aspects of storage systems. In the field of urban sustainability, he works on urban metabolism, megacities, and energy poverty in emerging countries.

In the field of complex systems his research focuses on nonlinear dynamics, statistical physics, and complex networks.

On the above-mentioned topics, he published over 40 papers in international Journals, among these PNAS, Nature Energy, Energy Policy, Ecological Indicators, Journal of Cleaner Production and Scientific Reports. He is currently topic editor of Sustainability and joined the editorial board of Complexity.

Areas of Activity

· Green Economy

University

Country Italy

City Lucca

Street Scuola IMT Alti Studi Lucca, Piazza San

Francesco, 19

Web https://www.imtlucca.it/en/giacomo.marzi

Contact

Name Giacomo Marzi

Role Assistant Professor of Management



Description

Giacomo Marzi is Assistant Professor (Tenured/RTDb) of Management at IMT School for Advanced Studies Lucca. He is Associate Editor (Department Editor) for IEEE Transactions on Engineering Management.

Giacomo received a PhD in Management from the University of Pisa, School of Economics and Management, Italy.

His primary research fields are Innovation Management, New Product Development, Strategic Management, and Entrepreneurship.

Areas of Activity

- Information and communication technology (ICT)
- Additive Manufacturing

- Social and Human Sciences
- Soft Matter

Marketplace Opportunities

PROJECT COOPERATION

OpenLab @IMT Lucca

OpenLab is an ambitious project that aims to be a bridge between research and society. The IMT School of Lucca has constantly developed research projects in collaboration with external stakeholders, so OpenLab is a significant development step in this direction.

Our goal is to develop a set of flexible data collection tools that will allow us to collect information in the field (e.g. in companies, schools, hospitals or even consumer data), which is essential to develop solutions based on specific stakeholder needs.

For example, is it possible to promote conscious consumption during a water emergency without compromising customer satisfaction? What are the impact of increasing digitalisation in the workplace on employee productivity and job satisfaction? How can cooperation and collaborative behaviour be developed among students and teachers in schools?

Answering these questions requires access to specific and highly sector-specific information.

OpenLab aims to be the hub of this data collection.

ITALIAN:

L'OpenLab è un progetto ambizioso, che punta ad essere un ponte tra ricerca e società. La Scuola IMT di Lucca ha da sempre sviluppato progetti di ricerca in collaborazione con stakeholders esterni, OpenLab è quindi un passo importante e concreto di sviluppo in questa direzione. Il nostro obiettivo è di disegnare una serie di strumenti flessibili di raccolta dati, che ci permetta di raccogliere informazioni sul campo (ad esempio in azienda, scuole, ospedali, o anche dati da consumatore), fondamentali per sviluppare soluzioni disegnate sulla base delle specifiche esigenze degli stakeholder.

Ad esempio, durante un'emergenza idrica, è possibile promuovere un consumo consapevole, senza ridurre la soddisfazione del cliente? Qual è l'impatto della crescente digitalizzazione negli ambienti di lavoro sulla produttività e soddisfazione professionale del lavoratore? Come si può sviluppare cooperazione e comportamenti collaborativi nelle scuole, sia tra studenti che tra corpo docente? Per rispondere a queste domande è necessario avere accesso ad informazioni specifiche e altamente settoriali. L'OpenLab punta ad essere il fulcro di questa raccolta dati.

University

Country Italy

City Lucca

Street

Contact

Name Luca Cecchetti

Role RTD-B Psychometrics



Description

La Scuola IMT Alti Studi Lucca è un'istituzione universitaria, di ricerca e alta formazione, con ordinamento speciale. Oggetto principale di studio è l'analisi dei sistemi economici, sociali, tecnologici e culturali.

La Scuola IMT persegue e realizza l'integrazione tra ricerca e insegnamento. Sin dalla sua fondazione, stabilita con decreto del Ministero dell'Università e della Ricerca del 18 novembre 2005, si è distinta per la qualità e la capacità innovativa della sua ricerca e del suo programma di dottorato, e per la sua natura interdisciplinare, caratterizzata dalla complementarietà di metodologie desunte da materie quali l'economia, l'ingegneria, l'informatica, la matematica applicata, la fisica, le neuroscienze cognitive e sociali, la storia politica, l'archeologia, la storia dell'arte e l'analisi e la gestione del patrimonio culturale.

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Social and Human Sciences

University

Country Italy

City Lucca

Street

Contact

Name Nicola Lattanzi

Role Full Professor of Strategy and Management



Description

The IMT School promotes the full integration of research and education. Since its institution by ministerial decree of November 18th, 2005, the School has distinguished itself thanks to the quality and innovativeness of its research and doctoral program and its interdisciplinary nature, characterized by the complementarity and discourse between methodologies drawn from economics, engineering, and computer science, applied mathematics, physics, archeology, art history and the analysis and management of cultural heritage.

Areas of Activity

- Green Science
- Artificial Intelligence (AI)
- Green Economy
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

SERVICE

Start-up between family business and family office: fundraising for companies investing in innovation, the green economy, and artificial intelligence.

We have developed a feasibility and financial sustainability analysis model for investment proposals involving family businesses and family offices. For several reasons, their collaboration can support start-ups that invest in innovation, green economy, and artificial intelligence.

Firstly, family businesses often have excellent knowledge and experience in the sector in which they operate, which they can use at the service of start-ups. This point can help start-ups develop innovative and sustainable solutions more effectively while ensuring compliance with ethical and environmental standards.

Secondly, family offices can offer a wide range of consulting and support services, which can significantly help start-ups seeking funding and growth. Additionally, family offices can provide long-term capital and investments, contributing to the financial stability of start-ups.

Thirdly, start-ups that invest in innovation, green economy, and artificial intelligence have excellent growth potential and can represent a good investment opportunity for family businesses and family offices. This point can allow them to diversify their investment portfolio, achieve long-term returns, and create a positive social and environmental impact.

Finally, the collaboration between family businesses, family offices, and start-ups can promote a more sustainable and responsible approach to a company that respects ethical, social, and environmental values.

IMT School for Advanced Studies Lucca, MoMilab Research Unit

University

Country Italy

City Lucca

Street Piazza San Francesco 19

Web https://momilab.imtlucca.it/



Contact

Name Monica Betta

Role Assistant Professor (Rtd-a)



Description

The MoMilab research group integrates basic neuroscience methods with experimental psychophysiology, cognitive neuroscience and structural/functional brain imaging for the investigation on multiple reasearch topics including sensorimotor experience and mental representation, experience dependence and plasticity and social affective neuroscience. In particular, the group has a strong background in the study of sleep electrophysiology and is intensively working in collaboration with clinician for the definition of automated tools for sleep medicine.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

PROJECT COOPERATION

New non-invasive tools serving the evaluation of cardio-metabolic risk in sleep medicine

Definizione e implementazione su dispositivi portabili di un nuovo set di indici estratti da misure periferiche non invasive per l'assessment dell'attività nervosa simpatica durante il sonno con valore predittivo del rischio cardio-metabolico.

ISE

Company

Country Italy

City Marlia

Street Via del Fanuccio, 99/C 55012 Marlia Lucca

Web https://www.iseweb.net/

Contact

Name Sandro Berchiolli
Role Co-Founder & CEO

Description

ISE is an engineering company that deals with consultancy regarding the reliability of plants and Maintenance Engineering, Predictive Maintenance and Condition Monitoring technical services and related Training and Coaching activities. The company mainly targets the industrial market, operating in many different sectors, including: Oil & Gas, chemical, petrochemical, cement, energy, food & beverage, pharmaceutical, etc.

For the industrial market and OEMs (Original Equipment Manufacturers), the company also offers Research and Development services relating to data acquisition systems, IIoT, Time series databases, ML algorithms and complete applications based on specific needs.

ISE also designs and markets Twise® products for Predictive Maintenance, Condition Monitoring and Testing activities.

Areas of Activity

Information and communication technology (ICT)

Istituto di Biorobotica

University

Country Italy

City Pontedera

Street Viale Rinaldo Piaggio 34

Web https://www.santannapisa.it/it/istituto/

biorobotica



Contact

Name Debora Zrinscak

Role Post-Doctoral Researcher



Description

Soft Robotics is an interdisciplinary field of robotics that deals with robots built out of soft and deformable materials capable of actively and safely interacting with humans and the environment. In particular, the Soft Mechatronics for Biorobotics laboratory works on the development of innovative artificial organs, manipulators and robotic arms aiming at replicating complex motions in a safe and programmable manner.

Areas of Activity

· Robotics and Biorobotics

Marketplace Opportunities

PRODUCT

A Soft Robotic Artificial Cardiac Muscle

We present an innovative technology for the development of soft and deformable total artificial heart devices. Every year more than 17 million people die because of heart failure. We studied an alternative solution to the present state-of-the-art devices and practices. In particular, we combined the contraction of soft artificial muscles and the deformability of elastomeric structures, managing to replicate the complex cardiac pumping functionality.

ITALTEL SPA

Company

Country Italy

City Milan

Street

Web http://www.italtel.com



Contact

Name Paolo Secondo Crosta

Role Head of Innovation Lab & Research Program



Description

We help our customers to choose the most suitable solutions for the characteristics of their business, to develop the traditional technologies they already have in the field, in order to integrate them with new technologies according to hybrid-cloud and cybersecurity logic. We do that thanks to our robust ability for system integration with multi-technology application, on products and technologies developed by us or by third parties. We support customers over time with our managed services, in order to ensure the continuous technological and security updates of the solutions provided. Creating value for customers is our guiding star.

Our core business focuses on the design, development and deployment of communications networks and on the provision of collaborative solutions created by integrating state-of-the-art technologies. They can be developed in our labs or by our ecosystem of partners. The framework is completed by the provision of innovative services in infrastructure design and engineering, in network automation and security, and the focus on innovative lines, such as 5G, UBB, IoT, Digital Workspace and Analytics & Automation.

Areas of Activity

- Green Economy
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Quantum Technologies
- Artificial Intelligence (AI)

Marketplace Opportunities

PRODUCT

Blockchain technology (e.g. for Data Collection or Payment Systems)

Italtel has developed a blockchain solution, based on Hyperledger Fabric infrastructure (for an important Italian Utility), able to collect data and to prepare pre-branded bulletins shared with all customers with an approach "full trusted"

SERVICE

Telemedicine Solution

A comprehensive solution (DoctorLINK, on the Agid Cloud marketplace platform) able to manage sharing of audio, video, and data required for the diagnosis, treatment and follow-up of patients. Manages all the real time communication between patients and doctors; encompasses a tablet application for patients, a desktop application for hospital operators and doctors to allow remote monitoring, a Device Management function able to check all the components involved in the solution, remote sensors included.

PROJECT COOPERATION

Edge Platform (ETSI MEC) and Immersive Video Services

Starting from our activities on European projects, we have developed an edge platform able to sharing HD video contents, via any device, in (perceived) real-time interaction with the system and among the users, called Video Processing Application for the Multi-Access Edge Computing (i-EVS).

PROJECT COOPERATION

Digital Service Chain Governance

Within the activities of Horizon 2020 GUARD, we worked on a holistic framework to guarantee reliability and trust, targeting multi-domain business chains – multiple services interoperating through open interfaces, cross interconnected infrastructures.

PRODUCT

IoT framework and applications

Design and development of IoT applications for multiple use cases: Smart Waste management, Smart Parking, Critical events monitoring (e.g., flooding of underpasses; forest fires; structural health monitoring), Water management, applications based on Video acquisition and analytics, Telemedicine, Asset Tracking. Skills on the development of a mixed Cloud / Edge IoT environment.

PROJECT COOPERATION

Cooperation in EU projects

20-year experience in successful EU project funding.

Expert on R&D&I projects in the following technical topics: Cloud Computing, Next Generation Networks (5G/6G, Edge Computing and Fog Computing), virtualized technologies (NFV, SDN), High Performance Computer, Internet-of-Things (IoT), Big Data, Machine Learning and Artificial Intelligence, Blockchain, Cybersecurity, Quantum Key Distribution (QKD).

Interested in the following market sectors: telecommunication, smart cities, smart manufacturing, transportation, healthcare, energy, sharing/collaborative economy, circular economy and sustainability and cybersecurity.

IUSS

University

Country Italy

City Pavia

Street Piazza della Vittoria

Web https://www.iusspavia.it/it



Contact

Name Margherita Righini

Role Post doc



Description

IUSS is a public Institute of Advanced University Education, (funded by the MUR) which works alongside the University of Pavia and the University of Milan to offer highly qualified educational paths to particularly talented students, enhancing their abilities. t is a young scientific and cultural community that offers opportunities for scientific and cultural enrichment, especially in a transversal and interdisciplinary sense.

- Green Science
- Space Tech

IUSS

University

Country Italy

City Pavia

Street

Web https://www.iusspavia.it/it



Contact

Name Serena Sapio Role PhD candidate



Description

IUSS is a public Institute of Advanced University Education, (funded by the MUR) which works alongside the University of Pavia and the University of Milan to offer highly qualified educational paths to particularly talented students, enhancing their abilities.

It is the only University School for Advanced Studies in the Lombardy region that offers Ordinary Courses together with Scuola Normale and Sant'Anna of Pisa.

It is a young scientific and cultural community that offers opportunities for scientific and cultural enrichment, especially in a transversal and interdisciplinary sense, with a proactive approach, directed to face the future with responsibility and confidence, and to build innovative and sustainable projects and solutions.

IUSS proposes that its students become women and men capable of contributing to the advancement of knowledge, in both the scientific and humanistic fields, by caring for their research training and developing their own research programs.

- Green Science
- Space Tech

Kedrion

Company

Country Italy

City Lucca

Street

Web https://kedrion.com

Contact

Name Filippo Mori

Role innovation Manager



Description

Kedrion Biopharma è un'azienda biofarmaceutica dinamica e in crescita. Siamo specializzati nello sviluppo e nella produzione di farmaci plasma-derivati per il trattamento di patologie e condizioni debilitanti e spesso rare. Il nostro portfolio include terapie per l'Emofilia, le Immunodeficienze Primitive e la sensibilizzazione da Rh, oltre a prodotti ampiamente utilizzati come l'Albumina.

- · Additive Manufacturing
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

Laboratorio di Biologia - Scuola Normale Superiore

University

Country Italy

City Pisa

Street

Contact

Name Fabiana MIRAGLIA

Role Assegnista di Ricerca



Description

My research team, led by Dr. Emanuela Colla, investigates the role of the enteric nervous system in neurodegeneration in Parkinson's disease (PD). More specifically, we focus on the accumulation and deposition of alpha synuclein (aS) protein in the gut as the site of disease onset, prior to its progression in the brain. For this purpose, we have successfully established enteric colonic cultures from young and adult aS transgenic and age-matched controls (not- transgenic) mice. Alongside in-vitro experiments, we perform ex-vivo investigation to analyze intestinal pathways and signals.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Laviosa Chimica Mineraria SpA

Company

Country Italy

City Livorno

Street

Contact

Name Giovanni Laviosa

Role CEO

Description

produzione, vendita, importazione, lavorazione, commercializzazione di prodotti chimici, minerari e/o chimici/minerari non metalliferi.

Areas of Activity

• Additive Manufacturing

Laviosa Chimica Mineraria SpA

Company

Country Italy

City Livorno

Street

Contact

Name Olimpia Laviosa

Description

production, sale, import, export, processing, distribution of chemical and mine products

Areas of Activity

· Additive Manufacturing

Liessi & Partner

Company

Country Italy

City Florence

Street

Contact

Name Stefano Liessi

Role Business Developer Manager



Description

Focus on Business Development and Technology Transfer

- Computational Chemistry
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Agricultural Science

LIFTT

Investor

Country Italy

City torino

Street

Web https://www.liftt.com/



Contact

Name alessandra scotti

Role Ho Institutional Relations & Scouting

Description

LIFTT è una Holding di Venture Capital di recente costituzione che investe in progetti ad alto contenuto tecnologico, per favorire il trasferimento tecnologico di idee innovative verso il mercato, con l'intento di generare un forte impatto sul territorio. Abbiamo all'attivo già oltre 32 investimenti, in tutti i settori industriali: nostro criterio principale di investimento è l'innovazione tecnologica. Investiamo a partire dalla fase pre-seed, fino a series A.

- Microelectronics
- · Quantum Technologies
- Artificial Intelligence (AI)
- High Performance Computing (HPC)
- Additive Manufacturing
- Big Data and Quantum Computing
- · Soft Matter

- Space Tech
- Green Economy
- Information and communication technology (ICT)
- Nanotechnologies
- Photonics
- · Mechanics and new materials
- · Robotics and Biorobotics

Liftt

Investor

Country Italy

City Torino

Street

Contact

Name Claudia Bonaccorsi

Role Scouting



Description

venture capital holding company looking for early stage deep tech startups

- Big Data and Quantum Computing
- Mechanics and new materials
- Space economy
- · Quantum Technologies
- High Performance Computing (HPC)
- Green Economy
- Computational Chemistry
- Photonics

- Information and communication technology (ICT)
- · Additive Manufacturing
- Microelectronics
- Nanotechnologies
- Robotics and Biorobotics
- Space Tech
- Artificial Intelligence (AI)

LMPE srl SB

Company

Country Italy

City Capannori

Street Via Nuova 44a

Web https://www.lmpe.eu/it/lmpe/



Contact

Name Francesco Sandias

Role President



Description

Laboratorio Materiali Polimerici Ecocompatibili srl Società Benefit è una Start-up Innovativa. Si è costituita ad Ottobre 2016, è Spin-off affiliato a INSTM (Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali) di Firenze - www.instm.it ed è UdR dell'Università di Pisa.

LMPE è un Laboratorio di Ricerca e Sviluppo Sperimentale che opera nel settore dei Materiali Polimerici ed Additivi Eco-compatibili applicabili in svariati settori commerciali quali packaging, medicale, tessile, agricolo, nutraceutico, cartario, oil&gas.

In ambito Sostenibilità il focus è sull'Economia Circolare, per questo motivo dall'inizio del 2019 infatti LMPE è membro firmatario della Piattaforma ICESP (Italian Circular Economy Stakeholder Platform) https://www.icesp.it/

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Additive Manufacturing
- · Green Science

- Mechanics and new materials
- Nanotechnologies
- Green Economy

LMPE srl SB

Company

Country Italy

City Capannori

Street Via Nuova 44a

Web https://www.lmpe.eu/it/lmpe/



Contact

Name Francesco Sandias

Role President



Description

Benefit Company, working at R&D and Analysis on Ecocompatibile Polimers. Promoting Circular Economy

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Green Science
- · Additive Manufacturing

- Mechanics and new materials
- Nanotechnologies
- Green Economy

LVenture Group

Investor

Country Italy

City Roma

Street via Marsala 29H

Web https://www.lventuregroup.com



Contact

Name Roberto Magnifico

Role Partner

Description

Early stage pre-seed/seed investors.

Areas of Activity

• Information and communication technology (ICT)

Medical MicroInstruments

Company

Country Italy

City pisa

Street via Giannessi 52, Montacchiello, Pisa

Web http://www.mmimicro.com

Contact

Name Massimiliano Simi

Role VP R&D



Description

Design and commercialization of teleoperated surgical robots for application in Microsurgery

Areas of Activity

- Artificial Intelligence (AI)
- · Additive Manufacturing

· Robotics and Biorobotics

MEDICAL-NOTE Srl

Company

Country Italy

City Pisa

Street Montacchiello Campus Via Umberto Forti, 6

Web https://www.medical-note.com/



Contact

Name Davide Caramella Role Scientific Director



Description

MEDICAL-NOTE develops a digital enabling environment for surgery able to enrich and streamline the workflow from the preliminary phases, to surgical planning, and the intervention in the operating room

- Artificial Intelligence (AI)
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Additive Manufacturing

Mermec Group

Company

Country Italy

City Monopoli

Street

Web https://www.angelcompany.com/

Contact

Name Francesca Tenorio Campanella
Role HR People & Knowledge Manager

Description

MERMEC is an Italian multinational company founded in 1970 and active in the field of advanced technologies for rail transport (signalling, measuring train, electric traction, telecommunication), urban electric mobility and industrial application. The company is based in Monopoli (BA) - Italy and has international offices in 21 countries through which it can provide technical assistance to its customers worldwide.

With about 1200 employees, MERMEC boasts an unmatched technical know-how that has allowed it to develop and market a well-structured portfolio of advanced solutions currently in use in 71 countries over the world.

MERMEC is a member company of ANGEL, the high-tech holding that includes some of the most innovative Italian companies in the fields of transportation and mobility, space, aviation, cyber security, artificial intelligence as well as rail automation.

- Artificial Intelligence (AI)
- Information and communication technology (ICT)
- Microelectronics

- Mechanics and new materials
- Space economy

Microtest

Company

Country Italy

City Altopascio

Street

Web https://www.microtest.net

Contact

Name Giuseppina Saracco

Description

Microtest designs and manufactures the automatic test equipment (ATE) for semiconductor integrated circuits.

Microtest portfolio of products and services includes:

- ATE design & manufacturing
- Test house & test program development
- · Microelectronic design house

- Mechanics and new materials
- Nanotechnologies
- Robotics and Biorobotics
- Space Tech

- Artificial Intelligence (AI)
- High Performance Computing (HPC)
- Information and communication technology (ICT)
- Microelectronics

MomiLab - Mind

University

Country Italy

City Pisa

Street Via S.Agostino, 66

Contact

Name Dario Menicagli

Role Research Collaborator



Description

Il gruppo Mind si occupa di studiare i processi di decision-making e i bias associati, applicando ai contesti sanitari, giuridici e accademici i risultati sperimentali e teorici della ricerca. Il gruppo comprende psicologici, scienziati cognitvi, economisti e giuristi, per un approccio sinergico e integrato allo studio del ragionamento umano.

Areas of Activity

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Social and Human Sciences

Marketplace Opportunities

SERVICE

Analisi e intervento sul decision-making

Ricerca e sviluppo di interventi individuali e di gruppo tesi alla comprensione e modifica dei processi decisionali, in particolare sui temi di salute e sociali.

Le forme di analisi e intervento proposte spaziano dalle metodologie digitali a quelle supportate da interazioni con l'ambiente, sempre basate sullo studio della cosiddetta "architettura della scelta".

NEST Lab - Scuola Normale Superiore

University

Country Italy

City Pisa (PI)

Street



Contact

Name Francesca Di Turo

Role Post-Doctoral Researcher



Description

NEST, the National Enterprise for nanoScience and nanoTechnology, is an interdisciplinary research and training centre where physicists, chemists and biologists investigate scientific issues at the nanoscale. This knowledge is exploited to develop innovative nanobiotechnological tools, nanoelectronic and photonic devices and architectures.

The NEST initiative comprises four distinct institutions: Scuola Normale Superiore, Istituto Italiano di Tecnologia, Consiglio Nazionale delle Ricerche and Scuola Superiore Sant'Anna. Although each institution has its own staff and administration (Laboratorio NEST of SNS, Center for Nanotechnology Innovation of IIT, the Istituto Nanoscienze of CNR, and Nanoplant of SSSA) facilities and activities are closely coordinated and scientists team up for specific scientific objectives regardless of their affiliation.

This concentration of efforts and flexibility allows NEST scientist to address a rather broad range of research activities that span from semiconductor/superconductor nanostructure design, growth and experimental investigation to single-molecule studies in live cells and tissues. Despite this broad scope, NEST scientists adopt a unified approach thanks to the close cultural integration of its multidisciplinary teams which is characteristic of nanoscience.

- Cultural heritage
- · Green Science

- Nanotechnologies
- Social and Human Sciences

NEST Lab - Scuola Normale Superiore

University

Country Italy

City Pisa

Street Piazza San Silvestro 12

Web https://www.laboratorionest.it/



Contact

Name Martina Borroni

Role Research fellow



Description

NEST, the National Enterprise for nanoScience and nanoTechnology, is an interdisciplinary research and training centre where physicists, chemists and biologists investigate scientific issues at the nanoscale. This knowledge is exploited to develop innovative nanobiotechnological tools, nanoelectronic and photonic devices and architectures.

The NEST initiative comprises four distinct institutions: Scuola Normale Superiore, Istituto Italiano di Tecnologia, Consiglio Nazionale delle Ricerche and Scuola Superiore Sant'Anna. Although each institution has its own staff and administration (Laboratorio NEST of SNS, Center for Nanotechnology Innovation of IIT, the Istituto Nanoscienze of CNR, and Nanoplant of SSSA) facilities and activities are closely coordinated and scientists team up for specific scientific objectives regardless of their affiliation.

This concentration of efforts and flexibility allows NEST scientist to address a rather broad range of research activities that span from semiconductor/superconductor nanostructure design, growth and experimental investigation to single-molecule studies in live cells and tissues. Despite this broad scope, NEST scientists adopt a unified approach thanks to the close cultural integration of its multidisciplinary teams which is characteristic of nanoscience.

- Cultural heritage
- Green Economy

- Nanotechnologies
- Social and Human Sciences

NEXMAN

Company

Country Italy

City Pisa

Street via della Canapiglia, 13

Web https://www.nexman.it

$NE \times MAN$

Contact

Name Dino Ravanelli

Role CEO



Description

Robotica, integrazione macchine, industrial analytics. Aiutiamo le aziende ad innovare il processo produttivo attraverso la gestione ed integrazione della comunicazione tra uomo e macchina.

- · Green Economy
- Information and communication technology (ICT)
- · Robotics and Biorobotics

Nexman Srl

Company

Country Italy

City Vecchiano

Street via della Canapiglia, 13

Web http://www.nexman.it

Contact

Name Alberto Mannini

Role Executive Partner



 $NE \times MAN$

Description

Robotica, integrazione macchine, industrial analytics. Aiutiamo le aziende ad innovare il processo produttivo attraverso la gestione ed integrazione della comunicazione tra uomo e macchina.

- · Robotics and Biorobotics
- Green Science

oculai

Company

Country Germany

City Munich

Street

Contact

Name Martin Henn

Role Account Executive



Description

automatically AI based Process tracking for shell construction

Areas of Activity

• Artificial Intelligence (AI)

oculai GmbH

Company

Country Germany

City Munich

Street

Web https://www.oculai.de/



Contact

Name Tim Sippl

Role CTO



Description

Computer Vision start up in the construction industry

- Artificial Intelligence (AI)
- Information and communication technology (ICT)

oculai GmbH

Company

Country Germany

City München

Street Am Kartoffelgarten 14

Web https://www.oculai.de



Contact

Name Yannik Mack

Role Co-Founder



Description

Building the autopilot for construction management.

- Artificial Intelligence (AI)
- Information and communication technology (ICT)

Oxentia

Company

Country United Kingdom

City Oxford

Street

Web https://www.oxentia.com/



Contact

Name Giancarlo Gaimari

Role Technology Transfer Consultant & BD Associate



Description

Oxentia delivers innovation strategy advice, training and accelerator programmes to higher education & research institutions, corporate clients and governments & local authorities all over the world.

- Artificial Intelligence (AI)
- Cultural heritage
- Photonics
- Green Economy
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Mechanics and new materials

- Nanotechnologies
- Space economy
- Green Science
- · Robotics and Biorobotics
- Social and Human Sciences
- Space Tech

Panakes Partners

Investor

Country Italy

City Milan

Street

Web http://www.panakes.it



Contact

Name Alessio Piuma

Role Investment Manager



Description

Panakes is a venture capital firm with the ultimate goal of providing a better life to people all around the world.

We back promising teams by providing both financial and business support to build the next generation of game-changing technologies companies in the field of Life Sciences.

We invest in ambitious early stage start-ups and SMEs with innovative products globally, mainly across Europe and Israel.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Pariter Partners

Investor

Country Italy

City Milano

Street

Contact

Name Matteo Elli

Description

Investimenti in startup tecnologiche early stage e team di ricerca a supporto del trasferimento tecnologico

- · Additive Manufacturing
- Space economy
- Space Tech
- Green Economy
- Big Data and Quantum Computing
- Photonics

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Green Science
- Microelectronics
- · Robotics and Biorobotics
- Quantum Technologies
- Artificial Intelligence (AI)

Pariter Partners

Investor

Country Italy

City Milano

Street



Contact

Name Michela Cristofolini Role Operation Manager

Description

Pariter Partners investe in startup deep tech early stage e in team di ricerca con la missione di supportare il trasferimento tecnologico e la nascita della prossima generazione di aziende tecnologiche

- · Mechanics and new materials
- Nanotechnologies
- Photonics
- Additive Manufacturing
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Microelectronics

- Robotics and Biorobotics
- Space Tech
- Quantum Technologies
- Big Data and Quantum Computing
- Information and communication technology (ICT)

Pariter Partners

Investor

Country Italy

City Milano

Street

Web https://www.pariterpartners.com/



Contact

Name Tommaso Pravettoni Role Investment Analyst

Description

Pariter Partners invests in deeptech and technology ventures empowering entrepreneurial scientists to make the impossible, this time possible.

- Big Data and Quantum Computing
- High Performance Computing (HPC)
- Microelectronics
- Nanotechnologies
- · Robotics and Biorobotics
- Space Tech

- Photonics
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Additive Manufacturing
- · Mechanics and new materials
- Quantum Technologies

PIUITALIA SRL

Company

Country Italy

City PESARO

Street VIA SIROLO 24

Web http://www.avconsultingitalia.com



Contact

Name Gabriele Angelucci

Role CEO - INDUSTRIAL DESIGN AGENCY



Description

"Industrial design and new product development"

this is the core business of AV Consulting, an Italian based company that works across a wide range of sectors as medical devices, automotive, home automation, machinery, lighting, food and beverage, packaging.

Since 2008 we have set up a Group made up of manufacturers of plastic, carbon, prototyping, additive manufacturing and service companies with expertise in product design, mechanical engineering, electronics, Certification and Patent experts, with the aim of covering all strategic areas and fully respond to our customers' requests.

We put it all together by defining a method tested over the years that makes us very attractive to large companies, SMEs and start-ups in different sectors, medical devices, industrial machines, consumer products, packaging, electric vehicles and much more.

We offer a tailored service supporting companies in the process of new product development, branding, sales and market development.

- Green Economy
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

- Additive Manufacturing
- Mechanics and new materials

Progress Tech Transfer

Investor

Country Italy

City Milano

Street

Web https://www.progressttfund.it/

Contact

Role

Name Leonardo massa



Description

Progress Tech Transfer is an investment fund specialized in sustainable technologies from research of Italian universities and public research organizations, start-ups, spin-offs, and visionary entrepreneurs.

- Quantum Technologies
- Artificial Intelligence (AI)
- Photonics
- Additive Manufacturing
- Nanotechnologies

- · Big Data and Quantum Computing
- Green Economy
- Microelectronics
- Mechanics and new materials

PROGRESS TECH TRANSFER FUND

Investor

Country Italy

City MILAN

Street

Contact

Name Andrea Basso

Role Advisor

Description

Pogress Tech Transfer is an investment fund specialized in sustainable technologies from research of Italian universities and public research organizations, start-ups, spin-offs, and visionary entrepreneurs. Complexity is our comfort zone, as we work with technology transfer offices in top institutions to scout deep tech opportunities and intellectual property leads to drive growth from lab to market and create impact. This is what we stand for. And we do it with a distinctive approach that blends finance, business vision, and industrial connections.

- Green Science
- Agricultural Science
- Space Tech

- Quantum Technologies
- Artificial Intelligence (AI)
- Photonics

QuantaBrain

University

Country Italy

City PISA

Street



Contact

Name Elisa Ferrari

Role CEO of QuantaBrain



Description

QuantaBrain stands for Quantitative Analysis of Brain. It is an Italian startup that uses deep learning to ease and anticipate and make more objective the diagnosis of psychiatric disorders. Our first application is the automatic diagnosis of Autism Spectrum Disorder, which as of today is based on a psychiatric evaluation that is subjective, time consuming and error prone.

Our algorithm is able to diagnose Autism using a functional magnetic resonance image (fMRI) that can be acquired in only 6 minutes. It is objective, accurate and does not depend on the age of the subject so it can be used for early diagnosis. Furthermore, it provides some insights on the neurological abnormalities in each subjects, enabling personalized medicine. Our business is a B2B and our customers are the hospitals and pharmaceuticals companies. We aim to profit through a subscription service that allows hospitals to upload an fMRI and get the diagnosis and a report on the brain functional abnormalities. Furthermore, we will sell the anonymized data collected through our service to pharmaceutical companies interested in developing personalized medicine for ASD. Traditional diagnosis in the US costs 2,800 \$ and can last upto 14h (because multiple interviews are performed), while the diagnosis based on our algorithm costs 1,613\$ (1,013\$ for the fMRI exam and around 600\$ as an average value for one subject considering the subscription price that we offer) and lasts 6 minutes (6 minutes for the exam and 0.5 seconds for the inference process).

- Artificial Intelligence (AI)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

QUIPU S.R.L

Company

Country Italy

City Pisa

Street via Moruzzi 1

Web http://www.quipu.eu



Contact

Name Vincenzo Gemignani

Role CEO



Description

Quipu produces software as a medical device for diagnostic ultrasound imaging.

- Artificial Intelligence (AI)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

Relief srl

Company

Country Italy

City Pontedera

Street viale Rinaldo Piaggio 32 Web http://www.reliefsrl.com

Contact

Name Gioia Lucarini

Role CEO



Description

A startup that develops medical devices

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

S. Paolo Risanamenti Speciali

Company

Country Italy

City Lucca

Street Polo Tecnologico Lucchese via della Chiesa XXXII

trav. I° n. 231 Sorbano del Vescovo Lucca

Web http://www.spaololucca.com

Contact

Name carlo andrea trasatti

Role ceo



Description

Società che applica tecnologie e sistemi per il recupero edilizio

Areas of Activity

• Green Economy

SanChip srl

Company

Country Italy

City Capannori

Street Via del Fanuccio 99/a

Web https://www.sanchip.net



Contact

Name Denise Pezzuoli

Role Co-Founder & CTO



Description

SanChip is an innovative startup that operates in the predictive maintenance field, with a particular focus on real-time monitoring and analysis of working fluids (e.g., lubricating oils). The innovation consists of IIoT devices, based on Lab-on-Chip technology, that perform multiparametric analyzes in real-time and manage data remotely using AI algorithms giving the user clear results and helping him in the decision-making phase. This new monitoring vision will allow both to minimize failures, downtime, and repair costs and also to save lubricant by minimizing waste, reducing the environmental impact, and increasing the performance of the assets themselves.

- Photonics
- Information and communication technology (ICT)
- Nanotechnologies

Sant'Anna School of Advanced Studies Pisa

University

Country Italy

City Pisa

Street

Web https://www.santannapisa.it/it

Contact

Name Andrea Vandin

Role Associate Professor



Description

Scuola di studi superiore Sant'Anna, Pisa

Areas of Activity

• Artificial Intelligence (AI)

Sant'Anna Schoool of Advanced Studies

University

Country Italy

City Pisa

Street

Web https://www.santannapisa.it/it



Contact

Name Fabrizia Auletta

Role Post-doc researcher



Description

Sant'Anna School of Advanced Studies is a public university institute - with special autonomy - working in the field of applied sciences: Economics and Management, Law, Political Sciences, Agricultural Sciences and Plant Biotechnology, Medicine, and Industrial and Information Engineering. The School promotes the internationalisation of didactics and research with innovative paths in the fields of university education, scientific research and advanced training.

Within the BioRobotics Institute of Sant'Anna School, our team is part of the Neuro-Robotic Touch laboratory. We develop and integrate novel transducers, both synthetic and bio-hybrid. We implement neuromorphic systems, with natural spiking coding of tactile information. We analyse neural data to unveil the neuronal processes underlying the human sense of touch, and we implement behavioural protocols to characterize the perception of tactile features. This body of neuroscientific knowledge and the developed biorobotic technologies converge in a key application domain in upper limb neuroprosthetics, with complementary interests stemming towards safe human-machine co-work, tele-presence for medical robotics and hand-held consumer electronics.

Areas of Activity

- · Robotics and Biorobotics
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Artificial Intelligence (AI)

Marketplace Opportunities

PRODUCT

IMEROS

IMEROS - Integrated MEdical RObotic Solutions aims at relieving pathologists' workload, standardizing a manual process still closely related to the pathologist's experience, providing a training tool for assistants and trainees. IMEROS is **multisensory apparatus** which exploits force and ultrasound measurements to **identify tumours in ex-vivo soft tissue samples** \[Massari et al., Sensors, 2019\].

Santanna

University

Country Italy
City Pisa

Street Via david supino 9

Contact

Name Rana Abu Bakar

Role Student

Description

A superior school

Areas of Activity

• Information and communication technology (ICT)

University

Country Italy

City Lucca

Street Piazza San Ponziano, 6

Web https://www.imtlucca.it/

Contact

Name Anna Smaniotto

Description

The IMT School for Advanced Studies Lucca is a Public University School for Higher Education and Research with a special statute that focuses on the analysis of economic, societal, technological and cultural systems.

The IMT School promotes the full integration of research and education.

Since its institution by ministerial decree of November 18th 2005, the School has distinguished itself thanks to the quality and innovativeness of its research and doctoral program and its interdisciplinary nature, characterized by the complementarity and discourse between methodologies drawn from economics, engineering, computer science, applied mathematics, physics, archeology, art history and the analysis and management of cultural heritage.

- Artificial Intelligence (AI)
- Cultural heritage
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Nanotechnologies
- Robotics and Biorobotics
- Soft Matter
- Computational Chemistry

- Mechanics and new materials
- Green Science
- Photonics
- Social and Human Sciences
- Space economy
- Information and communication technology (ICT)

University

Country Italy

City Lucca

Street

Web https://www.imtlucca.it/



Contact

Name Ennio Bilancini Role Full professor



Description

Research oriented university with special statute.

The IMT School hosts the headquarters of the GAME Science Research Center, an interuniversity research center focusing on game science.

Areas of Activity

- Cultural heritage
- Information and communication technology (ICT)
- Green Economy
- Social and Human Sciences

Marketplace Opportunities

SERVICE

GAME SCIENCE for Business, Education, Social Innovation and Technology

Game Science investigates various phenomena related to the notion of "game", intended both as a model of strategic behavior (i.e., interactive decision-making) and as a system of rules and mechanics for ludic activities (i.e., gaming and play).

Our research center offers services related to the **design**, **developement**,

- **implementation** and/or **measurement of the impact** of game-based actitivies aimed at:
- * public engagement
- * citizen science
- * building knowledge value
- * divulgation
- * knowledge transfer to productive sectors

- * entertainment
- * screening of human resources
- * development of educational tools
- * boosting of strategic thinking
- * fostering job satisfaction
- * certifying games

University

Country Italy

City Livorno

Street

Contact

Name Gemma Bolognesi

Role PhD student

Description

The IMT School for Advanced Studies Lucca is a Public University School for Higher Education and Research with a special statute that focuses on the analysis of economic, societal, technological and cultural systems.

Areas of Activity

Cultural heritage

University

Country Italy

City Lucca

Street Piazza San Francesco 19

Web http://musam.imtlucca.it/



Contact

Name Marco Paggi

Role Professore Ordinario di Scienza delle Costruzioni



Description

MUSAM è un'unità di ricerca interdisciplinare che integra meccanica computazionale e sperimentale, analisi numerica e scienza dei materiali per affrontare la ricerca di frontiera relativa allo sviluppo di modelli digital twin di materiali e processi. Gli argomenti applicativi riguardano la tribologia, la fluidodinamica, i problemi accoppiati in multi-fisica, l'integrità strutturale e la durabilità di materiali e strutture eterogenee, i sistemi e i dispositivi per le energie rinnovabili.

Areas of Activity

- Green Economy
- · Mechanics and new materials

- Soft Matter
- Artificial Intelligence (AI)

Marketplace Opportunities

PARTNERSHIP

PhD positions in Management of Digital Transformation

We propose a co-funding scheme (50% co-funding) to companies interested in a PhD position for the PhD in Management of Digital Transformation at IMT School for Advanced Studies Lucca.

The research topic is chosen by the partner company and candidates' selection is done together with professors of the School.

SERVICE

Experimental characterization of surfaces and high-precision mechanical testing

In-situ mechanical tests (uniaxial tensile and compressive tests, cyclic loading) with analysis of the evolution of the material microstructure.

Mechanical tests on thermo-viscoelastic properties of polymers, also inside a climatic chamber.

Fracture mechanics characterization of Materials.

Analysis of surface roughness and textures for quality control using confocal porfilometry.

https://www.imtlucca.it/it/ricerca/laboratori/musam-lab

SERVICE

Testing of paper and paperboard materials and coatings

Mechanical testing of paper and paperboard materials, including metal and polymer coated paper solutions.

Simulation software is also available to complement experiments in the lab and identify materials properties in a time and cost effective way.

SERVICE

Numerical simulations for tribology

Software to simulate the tribological response of bodies in contact, with also surface roughness and surface texture taken from experimental data. The methodology allows predicting the frictional response of materials in contact, wear, heat transfer and other surface phenomena.

University

Country Italy

City Lucca

Street

Web https://lynx.imtlucca.it/home

Contact

Name Riccardo Olivito

Role Ricercatore RTD-B Archeologia



Description

LYNX - Center for the Interdisciplinary Analysis of Images and renovated in 2022, LYNX promotes and carries out case study based research projects concerning the mechanisms of image production and their contextually specific reception and use. LYNX does not pose any limitation in terms of the cultural area, chronological period or medium to be addressed by the proposed research projects; it does, however, privilege projects that adopt multidisciplinary strategies of analysis, paying special attention, in particular, to approaches that are economic, sociological, architectural, urban-studies related, historical, art historical, philosophical, neuro-perceptive, behavioral, and media studies related.

Areas of Activity

- Cultural heritage
- · Social and Human Sciences

Marketplace Opportunities

SERVICE

Cultural Heritage and Digital Technologies. Towards a new understanding of objects, spaces, images, individual experience and social behaviours.

LYNX - [Center for the Interdisciplinary Analysis of Images, Contexts, Cultural Heritage](https://lynx.imtlucca.it/home) is a research unit of the IMT School for Advanced Studies Lucca. It aims at hosting, in the same setting and at the same time, both research projects dealing with contemporary phenomena and those addressing phenomena and contexts of the past.

LYNX is interested in both the domain of research and the industries and institutions that give a prominent role to the production, manipulation and reception of images (be they museum displays, urban spaces, single visual objects expressed in any medium, books, etc.). LYNX's goal is to promote and carry out transversal reflection on the overall theme of "Objects, spaces, images: individual experience and social behaviors."

Our research projects concern the mechanisms of image production and their contextually specific reception and use. LYNX does not pose any limitation in terms of the cultural area, chronological period or medium to be addressed by the proposed research projects; it does, however, privilege projects that adopt multidisciplinary strategies of analysis, paying special attention, in particular, to approaches that are economic, sociological, architectural, urban-studies related, historical, art historical, philosophical, neuro-perceptive, behavioral, and media studies related.

- **Among our topics:**
- * Role of Images, Objects and Spaces (Production, Contextual Reception, Uses, Tangible and Intangible Dimensions, from Antiquity onwards);
- * Image Tradition and Perception, Media (from Antiquity onwards, including Film Studies, Photography);
- * Difficult Heritage: Analysis, Management, Organization;
- * Digitization of Cultural Heritage;
- * Cultural Heritage Law and Globalization;
- * East and West (from Antiquity onwards);
- * Cultural Heritage Institutions, Museums Public Involvement;
- * Archaeological Excavations, Ancient Art, Ancient Societies;
- * Movement, Space, Representations (from Antiquity onwards);
- * Real and Virtual in Cultural Heritage;
- * UNESCO practices;
- * Cultural Diplomacy and Exchanges;
- * Art and Science (from Antiquity onwards);
- * Skills and Professions in Cultural Heritage and Creative Industries.

University

Country Italy

City Pisa

Street

Web http://www.sns.it



Contact

Name Alessandro Cellerino

Role Associate Professor



Description

Public University with research activities in Mathematics, Physics, Computer Sciences, Chemistry and Life Sciences.

- Artificial Intelligence (AI)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

University

Country Italy

City Pisa

Street Piazza San Silvestro, 12

Web https://www.sns.it/en/nest-laboratory

Contact

Name Annalisa Carretta

Role PhD student



Description

The Scuola Normale Superiore is a university institute of higher education and one of the institutions that administer NEST, the National Enterprise for nanoScience and nanoTechnology laboratory. NEST is an interdisciplinary research and training center where physicists, chemists and biologists investigate the matter at the nanoscale level. This knowledge is exploited to develop innovative nanobiotechnological tools, nanoelectronic and photonic devices.

- Nanotechnologies
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Photonics

University

Country Italy

City Pisa

Street P.za dei Cavalieri, 7, 56126 Pisa PI

Contact

Name Enrico Catalano

Role Postdoc researcher



Description

The Scuola Normale Superiore is a university institution with special status that promotes culture, teaching and research in the Humanities and in the mathematical, natural and social sciences, exploring their interconnections and encouraging interactions with the outside world.

I work on nanotechnology and nanomedicine for advanced solutions of diagnostics and target therapies for smart personalized adaptive solutions to the biological microenvironment

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Nanotechnologies

University

Country Italy

City Pisa

Street

Contact

Name Fabio Lineu Fabrin

Description

Scuola normale superiore is a university institute of higher education, research and high-level training with a special status, whose prestige in the research and educational fields is recognised at an international level

- · Additive Manufacturing
- Mechanics and new materials

- Nanotechnologies
- Soft Matter

University

Country Italy

City Pisa

Street

Contact

Name Luca Nicoli

Role Ph.D.



Description

Scuola Normale Superiore

- Computational Chemistry
- Photonics
- High Performance Computing (HPC)

- Nanotechnologies
- Quantum Technologies

University

Country Italy

City Pisa

Street

Web http://www.sns.it



Contact

Name Pasqualantonio Pinque

Role Responsabile Area Ricerca e Innovazione



Description

Research and Innovation

Areas of Activity

- Photonics
- Green Economy
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Additive Manufacturing
- · Mechanics and new materials

- Nanotechnologies
- · Quantum Technologies
- Cultural heritage
- Microelectronics

Marketplace Opportunities

SERVICE

Centro di competenza NEST sulle nanotecnologie (CCNEST)

Il Centro NEST sulle nanotecnologie nasce su finanziamento della Regione Toscana su proposta della Scuola Normale Superiore, come centro servizi alle imprese del territorio.

Si avvale di strumentazione all'avanguardia all'interno di una [camera bianca](https://www.ccnest.sns.it/index.php/tecnologie/clean-room-e-strumentazione/) di classe ISO 6. Si trova all'interno del [Laboratorio NEST](http://www.laboratorionest.it/) della [Scuola Normale Superiore](http://www.sns.it/).

Il NEST, National Enterprise for nanoScience and nanoTechnology, è un centro interdisciplinare di ricerca e di formazione sulla nanoscienza dove operano fisici, chimici e biologi (circa 140 persone). Le conoscenze sviluppate sono utilizzate per realizzare nuovi strumenti nano-biotecnologici, dispositivi e architetture di tipo nano-elettronico e fotonico.

Il NEST include la Scuola Normale Superiore (Laboratorio NEST), l'Istituto Italiano di Tecnologia (Center for Nanotechnology Innovation), il Consiglio Nazionale delle Ricerche (Istituto Nanoscienze) e la Scuola Superiore Sant'Anna (centro Nanoplant). Le attrezzature e le attività di ricerca sono strettamente coordinate e i ricercatori collaborano sui comuni obiettivi scientifici specifici indipendentemente dalla propria affiliazione.

Il supporto all'impresa del Centro Competenze NEST (CCNEST) avviene mediante lo strumento del contratto di ricerca sulle tematiche relative alle nanoscienze e nanotecnologie. La sinergia del CCNEST con il laboratorio NEST permette di sfruttare al meglio sia le competenze del suo personale tecnico-scientifico che le attrezzature e le strumentazioni a disposizione, e di metterle a servizio dell'impresa che vuole fare innovazione.

Maggiori dettagli QUI: https://www.ccnest.sns.it/

University

Country Italy

City Pisa

Street

Web https://embedlab.sns.it/

Contact

Name Tommaso Giovannini

Role Researcher



Description

Scuola Normale Superiore

- Computational Chemistry
- Photonics
- High Performance Computing (HPC)

- Nanotechnologies
- Soft Matter
- · Quantum Technologies

University

Country Italy

City Pisa

Street

Contact

Name valeria demontis

Role Post doc researcher- Electronic transport in nanoscale devices



Description

University

Areas of Activity

- Microelectronics
- Nanotechnologies

Soft Matter

Scuola Normale Superiore di Pisa

University

Country Italy

City PISA, PI

Street

Contact

Role

Name Jessica Grigoletto

Assegnista di ricerca

Description

The research team led by Dr. Emanuela Colla, of which I am a member, investigates the role of the enteric nervous system in neurodegeneration in Parkinson's disease. More specifically, we focus on the accumulation and deposition of alpha synuclein protein in the gut as the site of disease onset, prior to its progression in the brain. For this purpose, we have successfully established enteric colonic cultures from young and adult alpha synuclein transgenic and age-matched controls (not- transgenic) mice. Alongside in-vitro experiments, we perform ex-vivo investigations to analyze intestinal pathways and signals.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Scuola Normale Superiore, Laboratorio NEST

University

Country Italy

City Pisa

Street Piazza San Silvestro 12

Web https://laboratorionest.it



Contact

Name Andrea Guerrini

Role Fixed Time Researcher



Description

NEST, the National Enterprise for nanoScience and nanoTechnology, is an interdisciplinary research and training centre where physicists, chemists and biologists investigate scientific issues at the nanoscale. This knowledge is exploited to develop innovative nanobiotechnological tools, nanoelectronic and photonic devices and architectures.

The NEST initiative comprises four distinct institutions: Scuola Normale Superiore, Istituto Italiano di Tecnologia, Consiglio Nazionale delle Ricerche and Scuola Superiore Sant'Anna. Although each institution has its own staff and administration (Laboratorio NEST of SNS, Center for Nanotechnology Innovation of IIT, the Istituto Nanoscienze of CNR, and Nanoplant of SSSA) facilities and activities are closely coordinated and scientists team up for specific scientific objectives regardless of their affiliation.

This concentration of efforts and flexibility allows NEST scientist to address a rather broad range of research activities that span from semiconductor/superconductor nanostructure design, growth and experimental investigation to single-molecule studies in live cells and tissues. Despite this broad scope, NEST scientists adopt a unified approach thanks to the close cultural integration of its multidisciplinary teams which is characteristic of nanoscience.

Areas of Activity

- Nanotechnologies
- Cultural heritage

Green Economy

Marketplace Opportunities

SERVICE

Attività di Ricerca conto terzi

Il Centro di Competenza NEST (CC NEST) sulle nanotecnologie finanziato nel 2010 dalla regione Toscana, si pone come centro di servizi di ricerca e sviluppo per le piccole e medie imprese (PMI).

Si avvale delle competenze del personale affiliato alLaboratorio NEST e della strumentazione di ricerca tra cui una camera bianca di classe ISO 6 per la nano- fabbricazione e nano-caratterizzazione.

Attraverso il CC NEST è possibile attivare dei percorsi di collaborazione con aziende private che intendano utilizzare le conoscenze, le competenze e le strumentazioni avanzate disponibili presso il nostro laboratorio per fare innovazione d'impresa. Sono disponibili accordi di collaborazione, tutti attivati mediante NDA (Non Disclosure Agreement), e diverse tipologie di servizi tra cui:

- -Training di strumentazione scientifica e messa a disposizione di tempo macchina
- -Studio e analisi di materiali (caratterizzazione, reverse engineering, verifica di patent infrigement, etc.)
- -Contratti di ricerca (sviluppo di una tecnologia, processo, materiale, prodotto)
- -Trasferimento Tecnologico (concessione brevetti, expertise)

Scuola Sant'Anna Pisa

University

Country Italy

City Pisa

Street

Contact

Name fatimata pietra

Role borsista

Description

La Scuola Superiore Sant'Anna è un centro universitario di riferimento per la formazione di eccellenza, con un'attenzione particolare allo sviluppo di percorsi innovativi in grado di rispondere alle esigenze provenienti dal contesto sociale e produttivo

Areas of Activity

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Robotics and Biorobotics

Marketplace Opportunities

PRODUCT

SSSA patents - licensing and partnerships

The Technology Transfer Office (TTO) - UVR- carries out support activities for the protection, valorisation and transfer to enterprises of the inventions of the researchers of the Scuola Sant'Anna.

The UVR office encourages the protection of know-how and intellectual property with the filing of patents, trademarks and copyrights in order to foster the creation and dissemination of innovative solutions that can improve the quality of life of the entire community; an opportunity to attract economic resources useful for transferring innovation and creating value for the future.

The Technology Transfer Office of Scuola Sant'Anna (TTO) carries out the following activities:

\- protection of research results;

\-IPR management and exploitation;

\-promotion and support for Spin-off creation;

\-marketing and promotion of research results;

\-building partnerships with companies and other institutions (public and/or private).

We are currently seeking partners interested in co-developing or licensing some of our patented inventions.					

University

Country Italy

City PONTEDERA

Street Viale Rinaldo Piaggio, 34

Web https://www.santannapisa.it/en/institute/

biorobotics/surgical-robotics-and-allied-

technologies-area



Contact

Name Andrea Mariani



Description

L'area "Surgical Robotics and Allied Technologies" dell'Istituto di BioRobotica mira a combinare robotica e bioingegneria per lo sviluppo di piattaforme che hanno la capacità di trattare molte patologie nel corpo umano, anche in zone difficili da raggiungere. L'obiettivo è quello di sviluppare dispositivi intelligenti che permettano di eseguire le procedure mediche o chirurgiche in regime minimamente invasivo, e in modo sempre più affidabile, riproducibile e sicuro.

In quest'area opera il team formato da Andrea Mariani, Laura Morchi, Nicolò Pasini, Andrea Cafarelli, Selene Tognarelli e dalla Prof.ssa Arianna Menciassi. Il team di ricerca lavora sul progetto di trasferimento tecnologico Soundsafe Care. Soundsafe Care ha l'obiettivo di portare alla commercializzazione un dispositivo medicale che combina ultrasuoni e robotica per trattamenti oncologici totalmente non invasivi.

Areas of Activity

Artificial Intelligence (AI)

- · Robotics and Biorobotics
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

PRODUCT

Soundsafe Care

[Soundsafe Care](https://www.soundsafecare.com/) combina ultrasuoni focalizzati e robotica per **rivoluzionare la chirurgia tradizionale**. Infatti, la tecnologia di Soundsafe Care abilita trattamenti chirurgici che sono precisi grazie alla **robotica** e completamente non-invasivi grazie all'uso di **ultrasuoni**. Il focus principale di Soundsafe Care è il **trattamento di tumori**.

Soundsafe Care nasce da **10 anni di ricerca** sull'argomento ed è attualmente incubato all'interno

di [RoboIT](https://roboit.it/), il polo di trasferimento tecnologico dedicato alla robotica, veicolato da [CDP Venture Capital SGR](https://www.cdpventurecapital.it/cdp-venture-capital/it/home.page) in collaborazione con [Pariter Partners](https://www.pariterpartners.com/about/).

Per ulteriori dettagli, trovate in allegato il nostro pitch.

INVESTMENT OPPORTUNITY

Soundsafe Care

Soundsafe Care combina ultrasuoni focalizzati e robotica per rivoluzionare la chirurgia tradizionale.

Soundsafe Care nasce da 10 anni di ricerca sull'argomento ed è attualmente incubato all'interno di RoboIT, il polo di trasferimento tecnologico dedicato alla robotica, veicolato da CDP Venture Capital SGR in collaborazione con Pariter Partners.

Soundsafe Care è ora alla **ricerca di un co-investitore che insieme a RoboIT supporti un round seed (da circa 1.5 milioni di euro)** per l'ingresso della tecnologia sul mercato veterinario.

University

Country Italy

City Pisa

Street

Contact

Name Claudio Oton

Role Associate Professor



Description

Il gruppo di sistemi integrati di sensori fotonici lavora nell'ambito della sensoristica in fibra ottica e dello sviluppo di sistemi miniaturizzati di sensori ottici basati nella tecnologia dell'ottica integrata su chip.

Il gruppo ha prestigio accademico internazionale in questo ambito, ma ha anche un forte rapporto con aziende locali per lo sviluppo di soluzioni innovative di sensing (Baker Hughes, Brembo, RFI, Agenzia Spaziale Italiana, ecc).

Areas of Activity

- Photonics
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Microelectronics

- Mechanics and new materials
- Robotics and Biorobotics
- Space Tech

Marketplace Opportunities

PRODUCT

Sensore in fibra ottica ad ultrasuoni

Con il finanziamento del programma Jump Proof of Concept abbiamo sviluppato un prototipo di un sensore in fibra ottica ad ultrasuoni, in grado di rilevare in maniera distribuita vibrazioni con una frequenza di campionamento fino a 1 milione di campioni al secondo, il più veloce del mercato. La tecnologia è brevettata, e cerchiamo clienti/investitori/collaborazioni per lo sfruttamento della tecnologia.

University

Country Italy

City Pontedera

Street Viale Rinaldo Piaggio, 34

Web https://www.santannapisa.it/it/istituto/

biorobotica



Contact

Name Filippo Agnesi

Role Researcher



Description

"The "Biorobotics Institute" has a large patrimony of competencies in the sectors of biorobotics and bionics including implantable technologies.

Within the "Bioelectronics Area" of the Biorobotics Institute, the "Translational Neural Engineering" group within the laboratory of Prof. Silvestro Micera has extensive experience with the development of neuroprosthetic devices. Specifically, this group has a unique experience in the use of intraneural stimulation of the peripheral nervous system with a specific accent on restitution of sensory feedback in amputees, modulation of physiological functions and control of muscle activity for the execution of grasping activity in paralyzed hands."

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

PRODUCT

Medical device to restore the ability to grasp and manipulate objects in patients affected by paralysis

As a Spin-Off of Scuola Superiore Sant'Anna, we are developing an implantable medical device that will allow patients affected by paralysis, such as spinal cord injury patients, to regain the ability to use their hands with significant improvements in quality of life and independence. Thin film, high density, electrodes will be implanted in the nerve of the forearm to control hand muscles using electrical stimulation. Complex stimulation patterns will allow the execution of coordinated hand movements allowing multiple types of grasp, controlled through a customizable interface system tailored to the specific patients needs.

University

Country Italy

City Pisa

Street

Web https://www.santannapisa.it/it



Contact

Name Giampiero Contestabile

Role Associate Professor



Description

Sant'Anna School of Advanced Studies is a public university institute - with special autonomy - working in the field of applied sciences: Economics and Management, Law, Political Sciences, Agricultural Sciences and Plant Biotechnology, Medicine, and Industrial and Information Engineering.

TeCIP Institute:

The Telecommunications, Computer Engineering, and Photonics Institute (TeCIP) of the Scuola Superiore Sant'Anna in Pisa was created in 2001 as a Centre of Excellence funded by the Italian University, Scientific and Technological Research Ministry.

The core research domains in the TeCIP Institute are:

Telecommunication networks, systems and components implemented with partial or full use of photonic technologies and relevant software control techniques;

Cyber-physical systems, real-time computing, artificial intelligence and cyber-security. Photonic Integrated Circuits for datacom, sensors and networks and biophotonics.

Photonics

The research Unit "Photonics" conducts interdisciplinary research activities that integrate optical techniques, materials, devices and systems for a variety of applications

By developing photonic solutions from integrated device to system level, the research addresses applications in optical telecommunications, quantum photonics, microwave systems (i.e., 5/6G and radars), sensing, environmental monitoring, healthcare, and space observation. Key to most of these activities is the close collaboration with INPHOTEC – the photonic technology Center of Scuola Superiore Sant'Anna – that allows the development of integrated photonic devices on different material platforms, from the device design to the final system packaging. This capability is complemented by state-of-the-art optical laboratories and supported by a large group of researchers with complimentary skills. The large network of industrial collaborations available within the unit provides an established route for technological demonstration up to TRL 6.

Integrated photonics

Specific topics include: InP and Silicon Photonic Integrated Circuits (PICs) for telecom, space and quantum applications; Integration technologies for heterogeneous photonics circuits; Photonic integration for neural networks; High-frequency PICs for microwave photonics

The area is concerned with research activities related to the development of monolithic and hybrid photonic integrated circuits, subsystems and systems. The activities leverage on the support of the INPHOTEC centre, a state-of-the-art technology centre for the fabrication and package of photonic integrated circuits. In its 500 m2 cleanroom area, the centre hosts the whole suite of equipment and tools required for the manufacturing of a large variety of photonic integrated solutions, from device modelling and design to complete back-end processing and packaging. The research activities, build on several technological platforms (Silicon, Silicon Nitride, Glass, Lithium Niobate on Insulator) and, on the hybrid integration of these platforms with heterogeneous materials such as graphene and III-V semiconductor compounds. The availability of an extensive set of packaging tools supports the translation of these devices to system applications and facilitates industrial collaborations. The fabrication capability is complemented by dedicated software packages for design and modelling, and by state-of-the-art optical laboratories for device and system characterisation.

Specific topics include:

InP and Silicon Photonic Integrated Circuits (PICs) for telecom, space and quantum applications Integration technologies for heterogeneous photonics circuits

Photonic integration for neural networks

High-frequency PICs for microwave photonics

Key Recent Projects

Industry-Oriented Integrated Photonics and Electronics – FELIX, funded by Tuscany Region; Photonic Intgerated Quantum Random Number Generation – QRNG, funded by the Italian Space Agency (ASI);

Secure Space-Earth Quantum Communication – QCommSpaceOne, funded by the Italian Space Agency (ASI);

PhotonHub Europe- funded from the European Union's Horizon 2020 research and innovation program under the Grant Agreement n*101016665, in Public Private Partnership with Photonics 21.

Areas of Activity

- Nanotechnologies
- Space Tech
- · Quantum Technologies
- Photonics
- Information and communication technology (ICT)

Marketplace Opportunities

SERVICE

PhotonHub Europe

Photonics – the science and technology of light – is a Key Digital Technology that is radically transforming the traditional industrial base. Photonics is essential to the functioning of new applications which are powering Industry 4.0 and which are also critical to our ability to fundamentally address the enormous global societal and environmental challenges of our times. Photonics technologies are being used to create and launch a myriad of superior and previously

unimaginable products in wide-ranging end-user industries from sustainable energy, agrifood, healthcare and security, to smart transport, building and communications systems. Most critically, photonics is also a key enabling technology for the transformation of production methods and new business models in European manufacturing which has been losing its competitive edge as a result of globalisation over recent decades to low cost mass manufacturing locations in Asia and elsewhere.

Overview of the Strategic Mission

In order to accelerate the uptake of photonics technologies by European industry, and thereby help to boost competitiveness and to foster new business and business models, PhotonHub Europe has established a unique European full-service one-stop-shop Photonics Innovation Hub in a manner which is deeply rooted within the wider ecosystem of innovation hubs and manufacturing right across the European continent for maximum coverage, leverage, impact and long-term sustainability.

PhotonHub has received funding from the European Union's Horizon 2020 research and innovation program under the Grant Agreement n°101016665, in Public Private Partnership with Photonics21.

Grand Challenges & Goals

As a digital innovation hub for photonics, PhotonHub provides European photonics and non-photonics companies, in particular SMEs and mid-caps, with open access and guided orientation to a broad range of services and capabilities covering:

"test-before-invest" innovation support capabilities along the full TRL and MRL value chain such as expertise, design, prototyping, experimentation, engineering and pilot manufacturing with further guidance to manufacturing in Europe

training and upskilling opportunities for both technology- and application-specific learning using lecture-based tutorials and hands-on lab-based training within the hub's competence centres, and even extended to virtual classrooms

business support services including IP advice, business coaching, and support to find investment from venture capital and other public and private regional and European sources of innovation funding

seamless links to targeted value-adding opportunities in the wider innovation ecosystem across all European regions, cluster organisations and digital hub networks

The services of the hub are accessible as a one-stop-shop through its central front office based in Brussels. The front office can be easily contacted by completing the following form Apply. The hub is ideally suited to the needs of both first users and early adopters in achieving the wider and faster uptake, integration and deployment of photonic technologies in innovative products for a wide variety of industry sectors for scaled-up business growth and production in Europe.

Innovation, Training & Business/Investment Support

PhotonHub builds on an impeccable track record of accomplishment in conducting photonics innovation with industry, most notably SMEs and mid-caps, and is therefore ideally positioned to commit to an ambitious plan of support for a critical mass of highly innovative, cross-border collaborative projects with European companies covering the full value of chain of innovation activities. The hub's competence centres act as technology suppliers in support of end-users for TRL acceleration from early stage support of feasibility proof-of-concepts and demonstrators at TRL3-4, to support of industrially compatible small-series pilot manufacturing at TRL5-7, to facilitating full-scale production and seamless transition to market launch at TRL7-8. The finances of the hub are carefully

balanced between strong subsidisation of the early stage prototyping activities carried out by the core technology partners within the consortium, and the additional use of cascade funding at the later stage of pilot production to facilitate the mobilisation of existing European manufacturing networks, and the linking of the innovative companies to European manufacturers in photonics. The PhotonHub funding is combined with local and/or regional financial contributions, as well as both inkind and in-cash contributions from the supported companies as a mark of their commitment to the innovation and industrialisation goals, thereby maximising the financial leverage.

Most critically, the majority of the funding to be deployed by PhotonHub is directly benefitting European SMEs and is to be used for cross-border support.

University

Country Italy

City Pisa

Street

Contact

Name Grover Avalos

Description

University

Areas of Activity

• Green Economy

• Green Science

• Social and Human Sciences

University

Country Italy

City Pontedera

Street Viale Rinaldo Piaggio, 34

Web https://www.santannapisa.it/it/istituto/

biorobotica



Contact

Name Laura Morchi



Description

L'area "Surgical Robotics and Allied Technologies" dell'Istituto di BioRobotica mira a combinare robotica e bioingegneria per lo sviluppo di piattaforme che hanno la capacità di trattare molte patologie nel corpo umano, anche in zone difficili da raggiungere. L'obiettivo è quello di sviluppare dispositivi intelligenti che permettano di eseguire le procedure mediche o chirurgiche in regime minimamente invasivo, e in modo sempre più affidabile, riproducibile e sicuro.

In quest'area opera il team formato da Andrea Mariani, Laura Morchi, Nicolò Pasini, Andrea Cafarelli, Selene Tognarelli e dalla Prof.ssa Arianna Menciassi. Il team di ricerca lavora sul progetto di trasferimento tecnologico Soundsafe Care. Soundsafe Care ha l'obiettivo di portare alla commercializzazione un dispositivo medicale che combina ultrasuoni e robotica per trattamenti oncologici totalmente non invasivi.

- Artificial Intelligence (AI)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Robotics and Biorobotics

University

Country Italy

City Pisa

Street

Web https://www.fluidwirerobotics.com/



Contact

Name Marco Bolignari

Role Researcher



Description

In Fluid Wire Robotics project, we develop innovative high-performance robotic arms capable of operating in critical environments. Based on proprietary "Fluid Wire" technology, we enable advanced manipulation in oil & gas facilities, underwater areas, nuclear power plants, mines and clean-rooms.

- · Mechanics and new materials
- · Robotics and Biorobotics

University

Country Italy

City Pisa

Street

Web https://www.santannapisa.it/en/institute/

mechanical-intelligence

Contact

Name Massimo Satler

Role Post-Doc



Description

The Intelligent Automation Systems of the Institute of Mechanical Intelligence investigates new systems, algorithms and architectures for Robotics and Automation.

Research fields include model-based design, control systems, mechatronics, robotics and artificial intelligence applied to the design and implementation of embedded systems for robotics, automation with augmented sensing and autonomous vehicles (UxV) for unknown or hostile environments.

Areas of Activity

- Artificial Intelligence (AI)
- · Robotics and Biorobotics

Marketplace Opportunities

PROJECT COOPERATION

Automatic crack detection

Design and development of AI-based autonomous detection and analysis of concrete cracks in structural health monitoring by means of drones

University

Country Italy

City Pisa

Street

Contact

Name Monia Gentile

Description

università

- Artificial Intelligence (AI)
- Photonics
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

- Mechanics and new materials
- Robotics and Biorobotics
- Green Science
- Social and Human Sciences

University

Country Italy

City Pisa

Street



Contact

Name Simone Tonini

Role Researcher



Description

As a public institution, the Sant'Anna School plays its role in favor of the community, proposing as a center of reference for avant-garde training, with paths of excellence that are divided into four main areas: the first level training aimed at students of the courses of I and II level; the Seasonal Schools, training paths of excellence with a strong interdisciplinary character; advanced training through MSc degree courses, PhD programmes and Master's programmes; Higher Education.

AutoXAI2 project was born from the cooperation between Sant'Anna School for Advanced Studies of Pisa, and the A.Celli company of Lucca, leader in the supply of machinery and advanced technologies for the paper and nonwovens market (www.acelli.it). The project is co-funded by Tuscany region and the company. The objective of the project is to identify anomalies during the production process, both to monitor the progress of a specific production line and to compare the performances of different production lines.

Areas of Activity

Artificial Intelligence (AI)

Marketplace Opportunities

PRODUCT

A novel statistical method for anomaly detection in industrial processes

We present an innovative methodology based on basic principles of statistical learning for anomaly detection in industrial processes and IoT environments. We present a 5-level analytical pipeline that cleans, smooths, and eliminates redundancies from the data, and identifies outliers as well as the features that contribute most to these anomalies.

Scuola Superiore Sant'Anna - Institute of Mechanical Intelligence - Robotic Mechanisms and Materials

University

Country Italy

Street

City

Contact

Name Marco Fontana

Role Associate Professor

Pisa



Description

Robotic Mechanisms and Materials (RMM) is a research group of the Institute of Mechanical Intelligence of Scuola Superiore Sant'Anna. The group is led by Prof. Marco Fontana and their research focus is on the development of innovative electromechanical hardware solutions for robotics and mechatronics. Recently, the group is working on a robotic manipulator system that is based on a novel actuation technology.

- · Mechanics and new materials
- · Robotics and Biorobotics

Scuola Superiore Sant'Anna - Istituto di Intelligenza Meccanica

University

Country Italy

City Pisa

Street

Contact

Name Gianluca Rinaldi

Role PhD student



Description

L'Istituto di Intelligenza Meccanica ha come obiettivo primario la progettazione e realizzazione delle parti hardware e software dei sistemi artificiali e lo studio della loro interazione futura con l'uomo. Buona parte delle attività dell'istituto sono focalizzate allo sviluppo di esoscheletri robotici, per fini riabilitativi e di assistenza al lavoro industriale.

Areas of Activity

- Artificial Intelligence (AI)
- Additive Manufacturing
- Mechanics and new materials

- · Robotics and Biorobotics
- · Soft Matter

Marketplace Opportunities

PRODUCT

FLEXOS: maximum results, assisted efforts

Flexos nasce come prototipo di esoscheletro robotico di spalla per assistere l'operatore industriale in task logistici quali sollevamento di pesi, direttamente sul luogo di lavoro. L'esoscheletro è completamente indossabile, portabile e leggero. Le interfacce con l'uomo sono soft quindi è comodo da indossare. L'assistenza viene data tramite un motore posizionato vicino alla spalla. Una volta entrato in funzione, FLEXOS aiuta l'operatore ad eseguire il task di sollevamento, rilassando tutta la muscolatura circoscritta alla spalla e diminuendo lo sforzo muscolare della stessa. Così facendo, si contrasta il logoramento muscolo-scheletrico della spalla.

Scuola Superiore Sant'Anna - TTO

University

Country Italy

City Pisa

Street

Web https://www.santannapisa.it/it/area-terza-

missione



Contact

Name Elisa Grassi

Role Innovation Promoter



Description

Scuola Superiore Sant'Anna is a public university institute - with special autonomy - working in the field of applied sciences: Economics and Management, Law Sciences, Political Sciences, Agricultural Sciences and Biotechnology, Medical Sciences, and Industrial and Information Engineering. Scuola Superiore Sant'Anna aims at experimenting innovative paths in research and education. Professors and researchers live and interact with the students, day after day, enjoying a continuous cultural and intellectual exchange. Innovative ideas, which are then developed in collaboration with foreign universities, organizations, companies and research institutes, are generated here. Due to its international nature, education of excellence and scientific community, Scuola Superiore Sant'Anna established itself as a reference both in Italy and abroad.

- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

- Mechanics and new materials
- Robotics and Biorobotics

Scuola Superiore Sant'Anna di Pisa

University

Country Italy

City Pisa

Street Piazza Martiri della Libertà, 33

Web https://www.santannapisa.it/it



Contact

Name Andrea Baldoni

Role Pisa



Description

La Scuola Superiore Sant'Anna: a research university, a school of talent, for a more sustainable and inclusive world

AREA TERZA MISSIONE - La Scuola Superiore Sant'Anna si impegna a rafforzare la propria capacità di produrre valore per la collettività, agendo come volano di sviluppo socio-economico, culturale e tecnologico e progettando il futuro per l'umanità. Avendo come riferimento strategico l'Agenda 2030 delle Nazioni Unite, con i suoi 17 obiettivi, 169 target e 240 indicatori.

La Scuola svolge iniziative di public engagement e di formazione permanente, attività di partnership, placement e supporto alle istituzioni, perseguendo una stretta sinergia con la formazione e la ricerca.

- · Social and Human Sciences
- Soft Matter
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Robotics and Biorobotics
- Nanotechnologies
- Space Tech
- · Quantum Technologies
- Additive Manufacturing
- · Mechanics and new materials
- Information and communication technology (ICT)
- Green Science

- Agricultural Science
- Space economy
- Cultural heritage
- Green Economy
- Computational Chemistry
- Photonics
- High Performance Computing (HPC)
- Microelectronics
- Artificial Intelligence (AI)
- Big Data and Quantum Computing

Scuola Superiore Sant'Anna, Institute of Mechanical Intelligence

University

Country Italy

City Pisa

Street Via Alamanni, 13b



Contact

Name Greta Vazzoler

Role PhD Student



Description

The Institute of Mechanical Intelligence was established in May 2021 by the union of the research groups of the Perceptual Robotics Laboratory (PERCRO) with the Advanced Sensing group of the Scuola Superiore Sant'Anna. The primary aim is the design and implementation of the hardware and software parts of artificial systems and the study of their future interaction with humans in medical and industrial fields.

Areas of Activity

- · Mechanics and new materials
- · Robotics and Biorobotics

· Additive Manufacturing

Marketplace Opportunities

PRODUCT

WRES & HANDEXOS: Rehabilitation platform for wrist and hand disabilities.

The proposed product involves two independent platforms for rehabilitating the wrist and the hand. Exoskeletons have been designed for patients' needs. Virtual Reality has been integrated to make the rehabilitation process more effective and engaging for the user.

University

Country Italy

Pisa City

Street

Contact

Name Lorenzo Gilli



Description

Il gruppo di comunicazioni ottiche wireless (OWC) si occupa di sviluppare sistemi di comunicazione per la trasmissione in spazio libero di dati con luce visibile o IR.

Il gruppo ha realizzato e progettato sistemi utilizabili in un ampia gamme di scenari (Satelliti, indoor, underwater, trasmissioni a lunga distanza Terra-satellite, High speed), collaborando con agenzie nazionali e internazionali (CNR, INFN, ESA, ASI) e aziende (TCI, Artemide)

Areas of Activity

- Photonics Space Tech
- Information and communication technology (ICT)

Marketplace Opportunities

PRODUCT

VLC indoor positioning system

In collaborazione con TCI srl, abbiamo sviluppato un sistema per il posizionamento indoor. Questo sistema si basa su tradizionali lampade LED che vengono modulate in maniera univoca. Utilizzando la camera frontale di uno smartphone commericale è possibile identificare le singole lampade e quindi orientarsi all'interno di uno spazio chiuso.

Questa tecnologia richiede hardware ridotti ed è particolarmente adatta a tutti quelli scenari nei quali i classici sistemi di posizionamento non funzionano

University

Country Italy

City Reggio Emilia

Street

Contact

Name Nicolò Pasini

Role Researcher



Description

Scuola di studi Superiori Sant'Anna

- Artificial Intelligence (AI)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- · Robotics and Biorobotics

Scuola Universitaria Superiore IUSS Pavia

University

Country Italy

City Pavia

Street

Web http://www.iusspavia.it/home

Contact

Name Giorgia Fosser

Role Senior researcher

G

Description

La Scuola Universitaria Superiore IUSS è un centro d'eccellenza per le scienze fisiche, sociali, umane, della vita e la tecnologia. In particolare, lo IUSS è specializzato nell'area della Comprensione e della Gestione degli Estremi (UME) con una consolidata esperienza nella valutazione, gestione e mitigazione del rischio di catastrofi naturali nonché nella stima dei danni derivanti da eventi estremi.

All'interno di IUSS, il centro CARISMA si focalizza sulle tematiche del cambiamento climatico e dello sviluppo sostenibile ed è il principale referente per IUSS del primo Dottorato Nazionale su Sviluppo Sostenibile e Cambiamento Climatico. Le principali attività di ricerca e di collaborazione con enti e aziende sono:

- 1. Valutazione degli impatti dei cambiamenti climatici e della variabilità climatica sull'ambiente, sull'uomo e sulle sue organizzazioni sociali, a sostegno dello sviluppo sostenibile.
- 2. Sviluppo di metodologie integrate per l'analisi complessiva del rischio (impatti diretti e indiretti) associato a fenomeni estremi naturali e tecnologici anche in combinazione (multi-hazard risk assessment).
- 3. Integrazione del cambiamento climatico nell'analisi e gestione del rischio, attraverso l'uso di dati e modellistica climatica anche ad alta risoluzione spaziale (~2.5km).
- 4. Sviluppo di modelli per la stima degli impatti economici dovuti a eventi estremi (incluso il Covid-19) che permettano una gestione integrata ed economicamente vantaggiosa dei rischi a sostegno dello sviluppo sostenibile.
- 5. Stima dell'impronta di carbonio e/o ambientale per aziende, prodotti tipo e organizzazioni attraverso la metodologia Life Cycle Assessment (LCA).
- 6. Sviluppo di modelli per le assicurazioni parametriche soprattutto nel campo dell'agricoltura.
- 7. Sviluppo di tecnologie dell'osservazione della Terra e analisi mediante tecniche di machine learning dei dati satellitari per l'attivazione di processi di trasferimento del rischio.

Areas of Activity

- Artificial Intelligence (AI)
- Green Economy

- High Performance Computing (HPC)
- Agricultural Science

Marketplace Opportunities

SERVICE

Consultancy per lo sviluppo sostenibile

- 1\. Valutazione degli impatti dei cambiamenti climatici e della variabilità climatica sull'ambiente, sull'uomo e sulle sue organizzazioni sociali, a sostegno dello sviluppo sostenibile.
- 2\. Sviluppo di metodologie integrate per l'analisi complessiva del rischio (impatti diretti e indiretti) associato a fenomeni estremi naturali e tecnologici anche in combinazione (multi-hazard risk assessment).
- 3\. Integrazione del cambiamento climatico nell'analisi e gestione del rischio, attraverso l'uso di dati e modellistica climatica anche ad alta risoluzione spaziale (~2.5km).
- 4\. Sviluppo di modelli per la stima degli impatti economici dovuti a eventi estremi (incluso il Covid-19) che permettano una gestione integrata ed economicamente vantaggiosa dei rischi a sostegno dello sviluppo sostenibile.
- 5\. Stima dell'impronta di carbonio e/o ambientale per aziende, prodotti tipo e organizzazioni attraverso la metodologia Life Cycle Assessment (LCA).
- 6\. Sviluppo di modelli per le assicurazioni parametriche soprattutto nel campo dell'agricoltura.

SERVICE

MATE per il rischio climatico fisico

MATE è la spinoff della Scuola Universitaria Superiore IUSS di Pavia dai ricercatori del gruppo CARISMA. Mate ha la missione di abilitare la valutazione dei rischi ambientali per facilitare le persone e le aziende nell'intraprendere azioni di mitigazione e adattamento ai cambiamenti climatici

Gli impatti fisici del cambiamento climatico stanno già avendo un effetto sulla nostra economia e società, e un ulteriore aumento della temperatura è già in atto come anche un aggravarsi delle conseguenze degli eventi estremi. In questo contesto, istituti finanziari, corporate enterprise e compagnie di assicurazione hanno espresso negli ultimi anni un elevato interesse in scenari e metodologie in grado di fornire un quadro completo del rischio legato al clima. A tali finalità, Mate offre i seguenti servizi commerciali sviluppati in 3 livelli:

- · Livello 1 From Raw to Informative DAta: fornitura di dati informativi che non richiedono elaborazioni modellistiche, ma che rendono accessibili ed utilizzabili i dati "open" relativi al mondo delle variabili ed indici climatici e di sostenibilità.
- · Livello 2 Data AnaLytics and performance Indices: messa a disposizione di indici che forniscano un'analisi critica dei dati e degli impatti sull'attività del cliente. Esempi: valutazioni dei danni diretti ed indiretti dovuti ad eventi climatici, valutazioni di rischio.
- · Livello 3 Modelling Tools and Management Solutions: sviluppo di modelli (matematici, fisici, econometrici, statistici, attuariali) per la gestione operativa delle attività dei clienti per l'ottimizzazione delle performance, la riduzione degli impatti e la gestione del rischio. Esempio un modello per la

dynamic financial analysis, o per la near-real time loss estimation, o per un programma assicurativo parametrico.

Scuola Universitaria Superiore IUSS Pavia

University

Country Italy

City Pavia

Street

Contact

Name Marcello Arosio



Description

IUSS

Areas of Activity

- Artificial Intelligence (AI)
- Agricultural Science

Scuola Universitaria Superiore Sant'Anna di Pisa

University

City

Country Italy

Street Piazza martiri della libertà, 33

Pisa

Web https://www.santannapisa.it/it



Contact

Name Alberto di Martino

Role Full Professor - Professore ordinario

Description

La Scuola Superiore Sant'Anna è un istituto universitario pubblico a statuto speciale, che opera nel campo delle scienze applicate: tra di esse, in particolare, anche le Scienze Giuridiche.

La Scuola persegue l'eccellenza e promuove l'internazionalizzazione della didattica e della ricerca, con l'obiettivo di sperimentare percorsi innovativi negli ambiti della formazione universitaria, della ricerca scientifica e della formazione avanzata.

Areas of Activity

Social and Human Sciences

Marketplace Opportunities

INVESTMENT OPPORTUNITY

Three Innovative Research Proposals in Criminal Law: Funding the Future of Criminal Law

We are requesting funding to secure research contracts and scholarships for young researchers to conduct research activities on three research proposals.

The first proposal focuses on **the challenges that transnational corporations pose to national legal orders with regard to corporate punitive liability**. It specifically addresses two issues: the issue of **jurisdiction** and the issue of the **criteria for assessing compliance of companies with respect to offenses committed abroad**.

The second proposal concerns the **criminal implications of non-financial accounting fraud in the

Italian legal order.** It is structured in two parts: firstly, it examines whether the **false non-financial statements may already be criminally relevant** under the criminal law in force in Italy; secondly, it explores **the need, methods and alternatives of a direct and autonomous criminal law protection of the truthfulness of non-financial declarations.**

The last proposal aims to **develop a proper penal response to discriminations related to sexual orientation and gender identity**. It is also divided in two parts: the first focuses on the **concepts of discrimination, sexual orientation and gender identity** (and other related notions), while the second asks which is the **most appropriate punishment** with respect to the various forms of discrimination, seeking alternatives to prison sentences (developing the concept of **empathic punishment**, _i.e._ a form of punishment based on new technologies that tries to re-educate the offender by making her experience – through virtual reality - the suffering of the victim of discrimination).

Sensosan

Company

Country Italy

City Roma

Street

Web https://www.sensosan.it



Contact

Name Bernald Leone

Role Founder & Ceo



Description

Sensosan meets the needs of safety and wellbeing in breathing.

We do it with Air Nebulizers managed by unique cloud platform + Air Fluid Pods today making the air safe and experiential with a scientific approach.

Wit our platform is possible to save 90% of operation costs, 99% of operational time and completely 100% data evidence.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Sigma Ingegneria Srl

Company

Country Italy

City LUCCA

Street strada provinciale di Sant'Alessio 1957

Web http://www.sigmaingegneria.com



Contact

Name Simone Giusti

Role CEO



Description

Robotica, Droni, Automazione Industriale

Areas of Activity

- · Additive Manufacturing
- · Mechanics and new materials

• Robotics and Biorobotics

Sigma Ingegneria srl

Company

Country Italy

City LUCCA

Street Via provinciale di Sant'Alessio, 1957

Web http://www.sigmaingegneria.com



Contact

Name Simone Giusti

Role CEO



Description

Design, robotic, drones, Industrial Machine

Areas of Activity

• Mechanics and new materials

SISSA

University

Country Italy

City Trieste

Street Via Bonomea, 265

Web https://www.sissa.it/





Contact

Name Audrey Franceschi Biagioni

Role Assegnista di Ricerca



Description

SISSA – Scuola Internazionale Superiore di Studi Avanzati is a scientific center of excellence within the national and international academic scene. At Neuron Physiology and Technology Lab, in SISSA (Trieste) our aim is to investigate the biological processes influenced by nanomaterials and nanomaterials interaction with biological membranes. The goal is to develop a new generation of devices or implantable materials targeted to the treatment of several diseases. For instance, we have been investigating the impact of graphene-based nanomaterials in animal model of anxiety. Graphene is the material with most superlatives: it is the best conductor of heat we know, the thinnest material, it conducts electricity much better than silicon, is 100-300 times stronger than steel, has unique optical properties, it is impermeable already as a monolayer, these properties can be exploited in many areas of research; new possibilities are being recognized all the time as the science of graphene and other two-dimensional materials progresses. These properties give realistic promise of creating a new, more powerful and versatile, sustainable and economically viable technology platform based on graphene and related layered materials. That's why, graphene research has already emerged as the top research front in materials science.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

PRODUCT

SINDREL

SINDREL è un dispositivo di somministrazione dei farmaci adatto sia al rilascio immediato che programmabile, e capace di diminuire il tempo di attesa per l'inizio dell'azione del farmaco,

controllare la durata dell'effetto, e soprattutto minimizzare gli effetti collaterali.

Il dispositivo SINDREL è a base di grafene, un nanomateriale capace di trasportare farmaci ed elettroni, e di conseguenza, il rilascio del farmaco può essere controllato tramite un apparecchio elettronico come un telefono cellulare.

Il dispositivo SINDREL viene posto a contatto con la mucosa orale, per esempio la gengiva, e il rilascio del farmaco viene regolato con un'app, così che il medicinale può essere rilasciato in base all'esigenze dell'utente.

Tale approccio ha il grande potenziale di aiutare i pazienti ad ottenere il miglior risultato possibile dalla terapia farmacologica.

SISSA - Scuola Internazionale Superiore di Studi Avanzati

University

Country Italy

City Trieste

Street via Bonomea 265

Web https://www.sissa.it





Contact

Name Tanja Lunardelli

Role TTO



Description

SISSA – Scuola Internazionale Superiore di Studi Avanzati – was founded in 1978 and is a scientific center of excellence within the national and international academic scene.

Located in Italy, in the city of Trieste, it features about 70 professors, 130 researchers, 300 PhD students and 120 technical administrative staff.

SISSA's activities focus on three main areas:

Physics - https://www.sissa.it/physics

Neuroscience - https://www.sissa.it/neuroscience

Mathematics - https://www.sissa.it/mathematics

Moreover, the Interdisciplinary Laboratory for Advanced Studies works at the interface between science, humanities and the public.

Areas of Activity

- Big Data and Quantum Computing
- High Performance Computing (HPC)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

PRODUCT

SISSA patents - licensing and partnerships

Technology and knowledge transfer is a crucial and strategic activity for SISSA. Our aim is to **create innovation and to guarantee the valorisation of research and talents.**

It includes a wide range of activities and it is closely related to the so-called **Third Mission** of the School, together with Teaching and Research, in **order to improve the impact of the School's activities on Society.**

SISSA's motto is _to follow virtue and knowledge_. Keeping this in mind, we try to create a solid bridge between Science and Industry: this bridge enhances knowledge valorisation, speeds up innovation and contributes to improve society and citizens' quality of life.

Our primary goal is to better **motivate SISSA community to enforce this mission for the valorisation of research activities** (and talents) and establish better connections with potential research partners and networks to create a virtuous contamination of ideas in the society.

- **SISSA Valorisation and Innovation Office promotes integration of knowledge and industry and facilitates technology transfer from the academia to the society** developing project proposals aimed at:
- increasing cooperation with PMI and Industries;
- promoting students' innovative activity and entrepreunal approach;
- improving knowledge valorisation and its impact.

SISSA boasts specific professional skills and a consolidated and documented expertise, as evidenced by the numerous research and industrial collaboration contracts signed with industrial clients (worth a total of over 1.2 million euros in the last 24 months alone, many of which with leading national and international Life Science companies), by a patent portfolio consisting of **14 industrial patents** (9 of which are licensed and under development) and **8 start-ups** founded.

We are currently seeking partners interested in co-developing or licensing some of our patented inventions:

[Composition for use in the treatment of glioma and glioma-induced epilepsy](https://www.knowledge-share.eu/en/patent/composition-for-use-in-the-treatment-of-glioma-and-glioma-induced-epilepsy/)

[Graphene-based drug delivery device for mucosal and transmucosal administration](https://www.knowledge-share.eu/en/patent/graphene-based-drug-delivery-device-for-mucosal-and-transmucosal-administration/)

[SUBSTRATES FOR THE CULTURE AND STIMULATION OF NEURAL CELLS](https://www.knowledge-share.eu/en/patent/substrates-for-the-culture-and-stimulation-of-neural-cells/)

[FLEXIBLE DEFORMABLE SHEET STRUCTURE](https://www.knowledge-share.eu/en/patent/flexible-deformable-sheet-structure/)

[Therapeutic treatment against neurodegenerative prion diseases](https://www.knowledge-share.eu/en/patent/therapeutic-treatment-against-neurodegenerative-prion-diseases/)

Should you be interested in discussing any of the projects above, we remain at your disposal for a meeting.

SISSA mathLab

University

Country Italy

City Trieste

Street Via Bonomea 265, SISSA mathLab

Web https://www.sissa.it





Contact

Name Gianluigi Rozza

Role Director's Delegate for Technology Transfer and Math Area

Coordinator



Description

SISSA – Scuola Internazionale Superiore di Studi Avanzati – was founded in 1978 and is a scientific center of excellence within the national and international academic scene. Located in Italy, in the city of Trieste, it features about 70 professors, 130 researchers, 300 PhD students and 120 technical administrative staff. Situated on the scenic Karst upland, the School is surrounded by a 25 acre park, and offers a stunning view of the Gulf of Trieste.

SISSA's activities focus on three main areas: Physics, Neuroscience and Mathematics. Moreover, the Interdisciplinary Laboratory for Advanced Studies works at the interface between science, humanities and the public.

All the scientific work carried out by SISSA researchers is published regularly in leading international journals with a high impact factor, and frequently in the most prestigious scientific journals such as Nature and Science. The School has also drawn up over 150 collaboration agreements with the world's leading schools and research institutes.

The quality level of the research is further confirmed by the fact that within the competitive field of European funding schemes SISSA holds the top position among Italian scientific institutes in terms of research grants obtained in relation to the number of researchers and professors. Such leadership should also be seen in terms of SISSA's ability to obtain funding, both from the private and public sectors, such as PRIN.

Since 2010 SISSA Mathlab is:

A laboratory for mathematical modeling and scientific computing devoted to the interactions between mathematics and its applications.

An interdisciplinary research center powered by the interest in problems coming from the real world, from industrial applications, and from complex systems.

A team of scientists pursuing frontier research, while expanding the opportunities for a dialogue across academic and disciplinary boundaries.

A partner for companies interested in mathematics as a tool for innovation.

A research team focusing on new trend in computational mechanics and numerical analysis. An integrated group in SISSA Mathematics Area, within the SISSA Phd Program In Mathematical Analysis, Modelling and Application and the SISSA-ICTP Master in High Performance Computing, as well as the master degree program in mathematics offered by SISSA with University of Trieste.

Areas of Activity

- Artificial Intelligence (AI)
- High Performance Computing (HPC)

Marketplace Opportunities

SERVICE

Advanced Numerical Simulation and Integrated Solutions

We do integrate high performance computing, model reduction, data science, uncertainty quantification, artificial intelligence in digital twins for processes and/or products, as well as complex systems.

Sissa Medialab

Consultant

Country Italy

City Trieste

Street

Contact

Name Davide Ludovisi

Description

Sissa Medialab si occupa di comunicazione della scienza, è una società di proprietà della SISSA, Scuola Internazionale Superiore di Studi Avanzati di Trieste

Areas of Activity

- Cultural heritage
- Green Economy
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Green Science

- · Social and Human Sciences
- Space economy
- Space Tech
- Artificial Intelligence (AI)

SNS

University

Country Italy

City Pisa

Street

Contact

Name Darya Krasilnikov Role Project Manager

Description

SNS

Areas of Activity

- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Social and Human Sciences

Nanotechnologies

Sodi Scientifica

Company

Country Italy

City Calenzano

Street Via Poliziano, 20

Web https://sodi.com/

Contact

Name Paolo Sodi

Role AD

Description

Road traffic law enforcement devices

Areas of Activity

• Information and communication technology (ICT)

STS Deloitte

Company

Country Italy

City Milano

Street Via Tortona 25

Web https://www.deloitte.com

Contact

Name Carlo Rolandi

Role Partner - STS Deloitte



Description

Tax consultancy firm

Deloitte is an international professional services network composed by different functions (including Tax&Legal)

As tax professionals we support companies (including start-up) starting from the moment in which are appointed to the, eventual, sale. We provide assistance/advices on all the tax aspects including grants, incentives, tax efficiency...

Areas of Activity

- · Green Economy
- Information and communication technology (ICT)
- Life Science (MedTech, BioTech, Pharma, Neuroscience)
- Microelectronics

- Mechanics and new materials
- Robotics and Biorobotics
- Agricultural Science
- Artificial Intelligence (AI)

Studio dott Ballardini srl

Company

Country Italy

City Budoia

Street Via San martin n. 4

Contact

Name Luciano Ballardini

Role Studio dott Ballardini srl



Description

Scieta di consulenza alle imprese per accesso alle agevolazioni

Areas of Activity

• Additive Manufacturing

Syneos Health

Consultant

Country Italy

City Milan

Street

Web https://www.syneoshealth.com/



Contact

Name Vincenzo Lopreiato

Role Snr Director, Product Development Solutions



Description

Syneos Health® (Nasdaq:SYNH) is the only fully integrated biopharmaceutical solutions organization purpose-built to accelerate customer success. We lead with a product development mindset, strategically blending clinical development, medical affairs and commercial capabilities to address modern market realities.

We bring together approximately 28,000 minds, across more than 110 countries, with a deep understanding of patient and physician behaviors and market dynamics. Together we share insights, use the latest technologies and apply advanced business practices to speed our customers' delivery of important therapies to patients.

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)

Marketplace Opportunities

PARTNERSHIP

Introducing the Virtual Incubator for Early stage companies to support your funding applications

The Virtual Incubator is a dedicated team aiming to **support early-stage development programs**, from drug/medical device candidate identification/selection up to the first clinical study. The model is mainly based on **strategic consulting and operational execution. Consultancy helps** transform an idea to a project, and define the roadmap. Upon request, it can also embed **operational support**, such as Preclinical, Bioanalytic, Biomarkers, PK modeling, Regulatory or Clinical (healthy volunteer and patient studies).

Our offer

Create an integrated team combining your expertise and resources with ours

Through strategic advisory, identify project strengths and weaknesses, recommend optimization actions, and help prepare the case for your fund raising

Support you in the execution to move as efficiently as possible to the next value inflexion point, either a clinical Proof of Concept (POC) or a Proof of Efficacy (POE)

Our Goal is operational Excellence

Syneos is eager to invest time to support innovative early-stage assets in order to contribute and promote innovation, helping bringing them from an early stage through to patients.

Clinical development and design of an optimal clinical proof of efficacy is a key success factor (speed, cost-effectiveness) for early-stage assets.

Collaborative mindset and long-term vision, is the core of our partnership model

University Politehnica of Bucharest

University

Country Romania

City Bucharest

Street Splaiul Independentei 313, Facultatea de

Energetica

Web https://upb.ro/en/

Contact

Name ADRIAN VALENTIN Boicea



Description

The University Politehnica of Bucharest is the largest technical university in south-east Europe. It was founded in 1818 and has around 26000 students, 17000 undergraduates and 9000 postgraduates.

Areas of Activity

- Artificial Intelligence (AI)
- Big Data and Quantum Computing
- Information and communication technology (ICT)

URTT - Ufficio Regionale di Trasferimento Tecnologico Regione Toscana

Consultant

Country

Italy

City

Firenze

Street

Contact

Name

Gioia Marrazzini

Description

URTT is the Regional Tech Transfer Office of Regione Toscana (Ufficio Regionale di Trasferimento Tecnologico). Its main purpose is to provide support for TTOs (Tech Transfer Offices) established in Tuscan Universities by building a shared vision and strategies to put SMEs in the condition to exploit local Research and Innovation infrastructure assets.

Areas of Activity

· Computational Chemistry

URTT - Ufficio Regionale di Trasferimento Tecnologico Regione Toscana

Consultant

Country

Italy

City

Firenze

Street

Contact

Name

Silvia Gaspari

Description

URTT is the Regional Tech Transfer Office of Regione Toscana (Ufficio Regionale di Trasferimento Tecnologico). Its main purpose is to provide support for TTOs (Tech Transfer Offices) established in Tuscan Universities by building a shared vision and strategies to put SMEs in the condition to exploit local Research and Innovation infrastructure assets.

Areas of Activity

· Social and Human Sciences

VEBEX is a BRAND OF CRL SRL

Company

Country Italy

City MARLIA - LUCCA

Street

Contact

Name SIMONE BERCHIOLLI

Description

VEBEX nasce a Lucca, cuore della "Tissue Valley" italiana, forte dell'esperienza e del know-how maturati da CRC in oltre 30 anni di attività nelle macchine papermaking e converting per carte tissue, paper e board. Riferendosi alle competenze di WIVA Network, di cui CRC è parte, si configura come uno spin-off tecnico dedicato alla progettazione, costruzione, vendita ed assistenza di macchine a supporto ed integrazione di linee da stampa per prodotti di fascia stretta ed etichette.

VEBEX ha coinvolto nel proprio staff risorse con competenze specifiche su materiali e processi inerenti ai settori di interesse, con l'obiettivo di concepire sistemi innovativi ma allo stesso tempo affidabili. Forte di una visione chiara ed un'ottima capacità di analisi, VEBEX focalizza la sua attenzione sullo sviluppo di soluzioni brevettate e di design progettando macchine dalle alte performance in grado di garantire vantaggi competitivi per i propri clienti.

Areas of Activity

· Mechanics and new materials



Freelancer

Country Italy

City Firenze

Street

Contact

Name Maria Lisa Platania



Description

Χ

Areas of Activity

• Life Science (MedTech, BioTech, Pharma, Neuroscience)