

Spin Off Companies of the University of Studies of Genoa UNIVERSITÀ DEGLI STUDI **DI GENOVA**

Technological Area



INSPIRE SRL	pag. 3
SPACE V SRL	pag. 5
WWS SRL	pag. 7



inspire srl

About us

- Inspire Srl was founded with the aim of devising, designing and developing highly innovative solutions in the field of control systems and management of collaborative drone swarms.
- Established at the beginning of 2017, it has become simultaneously a Spin Off of the University of Genoa. From February 2017 it is registered as Innovative Start Up and holds a patent concerning an innovative platform for the management of drones.
- The social structure is made up of four members with extensive experience in the ICT area, including a professor of the University of Genoa.

Mission

- The company's object is the development, production and marketing of products and services of high technological value in close collaboration with the Polytechnic School.
- The Inspire Srl team consists of people with many years of experience in the ICT, controls, microelectronics and miniaturized sensors areas and who have recently developed a highly innovative idea for the UAV (Unmanned Aerial Vehicle) market.



The product

In an emerging and highly competitive market such as drone applications, Inspire represents a paradigm shift: instead of trying to increase drone performance in terms of flight duration and payload capacity, Inspire offers an **innovative patented management and logistics platform** of collaborative drones, equipped with an automatic system to replace exhausted batteries and transported payload.

M.T. R.S.

 The change in the perspective from single to swarm configuration and the automated management of the battery and payload change of the M.A.R.S. (Multiple Airdrones Response System) platform opens up new application scenarios and the possibility of continuous and non-sporadic drone use.

Contacts: INSPIRE SRL Via XX Settembre 33/10 – Genova Mail: info@be-inspire.com VAT n. 02449470992



Many **applications** in which the use of drones is already a reality in continuous growth can be revolutionized by M.A.R.S.: monitoring and alert in case of forest fires, dislocation of detection sensors in emergency situations, distributed video surveillance, agriculture, search for missing, etc.



space v srl

About us

- SPACE V srl is an innovative startup, proposed by the Department of Mechanical, Energy, Management and Transport Engineering (DIME), which was born with the primary objective of acting as a reference point in the emerging Space Economy market, focusing on the sector of production of fresh food in space.
- The innovative Start Up was established in 2021 and in the same year it obtained the Spin Off recognition of the University of Genoa.
- The company is made up of four partners, including a professor from the University of Genoa and a spin-off company from the University.

Mission

- SPACE V srl aims to study, design and develop an adaptive vertical farm model in the space environment, to make optimal use of limited resources such as the volume and energy available.
- SPACE V is part of the opportunities generated by the Space Economy, i.e. the set of activities that, starting from the research, development and construction of space infrastructures, lead to the construction of housing modules and the generation of innovative products and services connected to permanence man in space.
- The solution is based on a modular structure that progressively adapts to the growth of the plants cultivated in it.



The product

- The short-term goal of SPACE V is to study, develop and test an adaptive payload for the greenhouse in orbit.
- The survival of astronauts for long periods of time in space requires them to become autonomous from Earth's supplies through the maximum exploitation of the limited resources available in situ and the adoption of new technologies.
- SPACE V's contribution to life support systems in space is based on its patented adaptive multilevel greenhouse.



The multi-layer adaptive greenhouse has a number of features that differentiate it from standard vertical greenhouses:

- Vertical adaptive multilayer mechanism that maximizes the production of the plant per unit of volume
- Ability to grow plants of different sizes and growth rates
- Greenhouse structure design and engineering for easy planting and harvesting of plants
- Shelf control of atmospheric chemical composition
- Shelf control of temperature and humidity and lower energy consumption
- Automated shelf nutrient supply and crop growth monitoring
- The greenhouse is equipped with an air exchange mechanism with the cabin that captures the CO2 produced by the crew and returns the O2 produced by the plants

Contacts: SPACE V SRL Via di Brera 2 – Genova Mail: <u>info@spacev.bio</u> VAT n. 02003230998



WEATHER WATER SAND

weather water sand srl

About us

Weather Water Sand (WWS) is an innovative start-up company founded in 2021 as a Spin-Off from the Department of Civil, Chemical and Environmental Engineering of the University of Genova by a group of professionals with several years of environmental modelling experience in academia and industry.

WWS was winner of the first prize in SMARTcup Liguria 2021 industrial category and was winner of the first prize in the STARTcup 2021

The company consists of five partners, including a professor from the University of Genova and a spin-off company of the University of Genova.

WWS has strong scientific relationships with universities and research canters, university spin-offs, public authorities and several industrial companies.

Mission

WWS provides innovative numerical modelling services for the entire spectrum of natural flows, including winds, waves, littoral and tidal currents, rivers and submarine gravity flows with applications to renewable energy projects, oil and gas developments and environmental projects on land and offshore.



7

Our services

Our modelling solutions result from experience developed through research activities by the different partners during their academic and industrial careers.

Weather Forecasting

- Weather hindcast analysis
- Site specific, high-resolution deterministic and statistical forecasts for wind, wave, tides and solar radiation
- Applications to economic evaluations for new and existing renewable energy projects
- Applications to facility operations & energy marketing

Submarine Geohazards

- Wind & wave hindcast analysis: Analysis of historical wind-wave climate at a site, probabilities of significant events, impact to sediment transport and catastrophic events (coastal erosion, submarine landslides, turbidity currents)
- Turbidity Current Modelling 1.5D & 3D coupled with seabed evolution
- Integrated coastal circulation models (wind, waves and currents) and turbidity current models

Geological Modelling

- Flow modelling and visualization in 1.5D, 2D and 3D
- Simulation of deposit geometries, grain size distributions and porosity/permeability estimation
- Simulation of topography evolution and stratigraphy, pinch-out geometries and evaluation of stratigraphic traps
- Comparison of modelling results with subsurface data (well logs, cores and 3D seismic data)

Fluvial and Coastal Hydraulics and Morphodynamics

- morphodynamic evolution (altimetric and planimetric)
- flood risk assessment
- sediment transport
- impact of dredging operations
- siltation and maintenance of navigation channels
- morphological evolution of river networks, deltas, tidal channels and estuaries
- bedforms formation and propagation

Our team is ready to develop specific solutions tailored to address client needs using software developed in-house and in the open market.

Contacts: WWS SRL Piazza della Vittoria 14 – Genova Mail: info@weatherwatersand.com VAT n. 02775270990

ICT Area



AIRFIELD SECURITY SRL	Pag. 10
BEES SRL	pag. 12
DOCSPACE SRL	pag. 14
SIM4FUTURE SRLS	pag. 16
TALOS SRLS	pag. 18
ZENABYTE SRL	pag. 20



AirFIELD Security srl

Who we are

The startup born from the research carried out in recent years by the SCNL laboratory of the DITEN department of the University of Genoa, in the area of cybersecurity of critical infrastructures. The research group has tackled in recent years, with a strongly interdisciplinary vocation, the problem of protecting industrial control networks, highlighting the need to bring together expertise in both cybersecurity, networking, and industrial engineering in order to effectively protect such infrastructures.

About

AIrFIELD offers solutions for cybersecurity monitoring through network traffic analysis. While several companies mostly propose solutions for monitoring networks with TCP/IP architecture, AIrFIELD focuses on the lower layers of the architecture, up to the analysis, aided by the use of Artificial Intelligence, of Fieldbuses.



Our Services

AIrFIELD offers cybersecurity monitoring solutions for industrial networks. AirFIELD's approach is based on the following pillars:

Protecting the OT network means safety: Ensuring the proper functioning of the OT network means safeguarding the integrity of production equipment and the safety of people

Transparent to Process: Our solutions minimize implementation issues and do not interfere with the process

Involving industrial engineers: The human/machine interface is designed to make possible for both IT and process engineers to understand what is going on

Our Product

AIrFIELD's solutions provide visibility directly into field communications, including fieldbus protocols and serial communication, by detecting physical anomalies, faults, and cyberattacks, including those that are not carried out through traditional lateral movements on the IT network.

The main features are:

Physics-based anomaly detection:

Fielbud protocol analyzer

Physical attack detection

Artificial intelligence support

Contacts: AirFIELD Security srl Piazza Corvetto 2/7, 16122, Genova Mail: info@airfieldsecurity.it Partita IVA 02961040991



bees srl

About us

- BEES (Bayesian Estimation for Engineering Solutions) is founded in 2021 as a spinoff of the Mathematics Department at UNIGE, and is now in the process of being also approved as a spinoff of the National Research Council (CNR)
- BEES is currently finalist in the competition StartCup Lazio 2021.
- The five BEES partners are mathematicians and physicists with years of experience in the development and application of computational algorithms and artificial intelligence methods in several fields: source imaging in magneto- ed electro-encefalography; reconstruction of atmospheric parameters from LIDAR data; trading algorithms for financial markets and cryptocurrency exchanges.



Mission

The main activities of BEES are in three distinct fields:

- Development and commercialization of a proprietary library of functions for stochastic computation based on Monte Carlo methods, with applications in diverse fields including neuroimaging and processing of LIDAR data.
- Consulting for the analysis of electroencephalographic signals, with particular focus on the presurgical evaluation of epilepsy.
- Consulting for mathematical/statistical modeling and specialized software development in various fields, including: uncertainty/risk quantification, trading on financial markets, trading on cryptocurrency exchanges.

Our services

BEES provides services related to the integration of the proprietary library (see section "Our products"):

- consulting/software development for companies interested in integrating BEES library within their softwares
- Courses on the interpretation of the results, aimed at the final users

In addition BEES offers consulting in the following fields:

- Processing of electro/magneto-encephalographic signals,
- Software development for discretional/automated trading

Contacts: BEES srl Via Dodecaneso 35, 16146 Genova (GE) Tel: 349 8821450 Mail: info@bees.srl Partita IVA 02753300991

The product

BEES is developing a proprietary library of functions based on Monte Carlo algorithms, that can be used to solve problems such as:

- Parametric inference in multi-object non-linear parametric models
- risk/uncertainty quantification in complex models
- Online tracking of objects

BEES will initialy commercialize said library for neuroimaging of electro/magneto-encephalogrpahic data, and for the analysis of particulate in atmospheric lidar.



docspace srl

About us

- DocSpace srl was founded in 2019 at the Dept. of Informatics, Bioengineering, Robotics and Systems Engineering (DIBRIS) and works in the domains of Software Platforms and Distributed Systems.
- In Feb. 2020 it obtained the official title of University of Genoa spin-off.
- The founding team includes five members, among which two DIBRIS professors and three young researchers.

Mission

- DocSpace srl has the development of software platforms for table synchronization in distributed systems as a core activity.
- The technical solutions provided support Collaboration, by enabling spreadsheet synchronization, and Business Intelligence, by enabling synchronization between spreadsheets and ERP and information systems.



Our Services

DocSpace provides assistance on:

- Data Analysis through user collaboration.
- Business Intelligence, through the interconnection between spreadsheets and external data sources.
- Collaboration with Public Administrations, Research Institutions and Companies in hightech projects.

Contacts: DocSpace srl Via Molo Cagni, Palazzina Servizi - Genova Tel.: +39 010 0985000 Mail: administration@doc-space.net Partita IVA: 02646920997

The product

- SpreadSheetSpace allows spreadsheets to maintain synchronization with other spreadsheets as well as with external information systems (e.g., ERP, CRM, etc.) to support collaboration and real time data analysis.
- Synchronization takes place under strict security guarantees, as it leverages strong end-to-end asymmetric encryption. Data never leaves the user administrative domains unencrypted.





sim4future srls

About us

- SIM4Future srls is a Hi Tech Company born from the Simulation group of Prof. Agostino Bruzzone of the Faculty of Engineering, Polytechnic School of the University of Genoa.
- The Group is one of the international leaders on Modeling & Simulation issues and is composed of people with long experience in the sector alongside young talents who have nevertheless obtained doctorates in this sector and developed projects both with Industries and with International Agencies as NATO and European Defense Agency.
- The Group already has many scientific publications in the main events in Europe, North America and Asia, but it is also active in project development, drafting proposals and co-operations on highly innovative issues.
- The team consists of 4 members, including a university professor, but the collaborators includes young people who have developed skills in this field for years and who work on highly innovative issues at the International Level.

Mission

- The main focus of SIM4FUture is to develop Solutions to Complex Problems that integrate Simulation, Modeling, Artificial Intelligence, Serious Games, Data Analytics and Extended Reality (XR).
- The Application Fields are multiple and include Defense, Homeland Security, Safety & Security, Business, Logistics, Supply Chain Management, Industrial Plants, Autonomous Systems, Automation, Project Management & Training.
- SIM4Future has also been promoting International Scientific and Technological Events such as I3M and WAMS for a long time and is involved in STRATEGOS Innovative Initiative



Our services

- SIM4Future offers package solutions and services for its sponsors that allow the integration of Innovative Models and Intelligent Agents in proposals and systems of other Companies and Institutions
- SIM4Future offers Consulting Services for Innovation and Business Development
- New services are developed based on the use of Autonomous Systems, Mobile Technologies, Simulation, XR and IoT
- Service and Support are provided on time to ensure that the solutions offered are always reliable and functional in a simple and direct manner
- Training & Education are other types of fundamental services that SIM4Future offers its clients in the Simulation and other Enabling Technologies Sectors

Contacts: SIM4FUTURE SRLS Corso Podestà 8/1 - Genova Mail: info@sim4future.it Tel: +39 010 7776487 VAT n. 02541560997

The product

- Our products use VR, AR, MR (Virtual, Augmented and Mixed Reality), AI & IA (Artificial Intelligence and Intelligent Agents)
- Our Products adopt the most advanced simulation Standards and Paradigms such as HLA (High Level Architecture), MSaaS (Modeling & Simulation as a Service) and applications of M2SG (Modeling, Interoperable Simulation and Serious Games
- We develop solutions that are purely softwarebased, multi-platform from Smartphone up to CAVE (Cave Automatic Virtual Environment) and complete with Hardware and Integration with real systems





talos srls

About us

- Talos srls is an innovative start-up, founded in early 2016, which operates in the field of cyber security. and has been recognized as Spin Off of the University of Genoa in March 2016.
- Talos srls won Start Cup Unige 2015, ITASEC Cybersecurity Startup Award 2018 and has been selected for Nato NCI Cyber Incubator pilot project in 2015 and in "Programma Regionale Sviluppo Startup" by Fondazione R&I in 2016.
- Talos boasts collaborations with important companies and international organizations like Poste Italiane, Deloitte and Istituto Italiano di Tecnologia (IIT).
- Talos management board includes a Full professor, an assistant professor and a post-doc fellow of the University of Genova.

Mission

Talos' main activity is to provide high-tech and innovative solutions in the field of cyber security in both business and consumer markets, through software development, provisioning of SaaS and On-Premise security tools and specialized security consulting services. These areas of intervention have been certified ISO 9001.



The product

- The flagship product of Talos is APPROVER, an automatic toolkit for in-depth, fully automatic security analysis of mobile applications.
- APPROVER automates the most critical steps of the security analysis thereby reducing the time spent on the assessment from days/weeks to minutes/hours.
- The key features include, but are not limited to:
 - Cutting-edge security analysis technology
 - Support of most popular security guidelines
 - Customizable security policies
 - Intuitive risk scoring and evaluation
 - Comprehensive and effective per-app reporting

Contacts: TALOS SRLS Via Magliotto, 2 - Palazzina Branca -Savona Mail: info@talos-sec.com Tel: +39 393 8180505 VAT n. 01715020093

- APPROVER is also available as a Software-as-a-Service (SaaS) solution requiring no configuration or installation
- APPROVER can also be used to monitor mobile apps distributed over both official and unofficial stores and promptly detect tampered, or counterfeit versions of official apps before unaware users use them.



ZenaByte

zenabyte srl

About us

- ZenaByte srl has been founded with the objective of developing innovative methodologies for the intelligent management, interpretation and knowledge extraction from data.
- The company has been founded in February 2018 after being recognised as Spin-Off of the University of Genova in July 2017.
- A professor and a researcher of the University of Genova are two of the shareholders.

Mission

- ZenaByte birth is based on the research activities, consolidated in several European projects and in collaboration with major international companies, of its founding members.
- ZenaByte's mission is the design and development of innovative data analytics algorithms and tools applied to industrial problems with a particular focus on railway transportation.



Our services

The ZenaByte core business is represented by software solutions development and computer architectures design for:

- Intelligent data management, processing, interpretation and reporting;
- Knowledge Extraction from data;
- Data enhancement to turn data into corporate assets;
- Decision support systems based also on risk analysis;
- The development of technologies for IT systems protection to guarantee their availability, confidentiality and integrity;
- The integration of technological solutions currently available in other sectors in the company reference context (e.g. Blockchain);

Contacts: ZENABYTE SRL Via Cesarea 2 - Genova Mail: info@zenabyte.com VAT n. 02520340999

- The integration of data coming from third parties and the creation of specific solutions for the collection and usage of data/information provided by "external" sources such as webservices, social networks, IoT platforms, and so on;
- Risk analysis (for industrial safety and security applications).

ZenaByte intends to develop:

- Business Intelligence tools to support railway decision makers using contex-aware KPIs;
- Data Analytics tools for intelligent assets and traffic management.



Environment Area



GEOSCAPE SCARL

GERMINA SRL

pag. 23

pag. 25



geoscape scarl

About us

- Geoscape cooperative, a new-born society, provides innovative, client-appropriate consulting services in the field of geoenvironmental analysis, spatial data management and digital mapping.
- Created by a team of young researchers, the company is based on a strong, broad and varied cultural background in several academic fields related to environmental and earth science.
- The company is also a research Spin off at the Department of Earth, Environment and Life Sciences (DISTAV) University of Genoa: the working group is composed of 9 professional figures including university professors, research fellows and PhD students belonging to the above mentioned department.

Mission

Our mission is to export outside the university borders innovative methods of spatial data collection, monitoring and mapping, from mountainous and flat areas to underwater, with the aim of providing effective and sustainable solutions to a broad range of geoenvironmental problems. We base our work on an integrated and multidisciplinary approach which is extremely helpful in complex siutations.

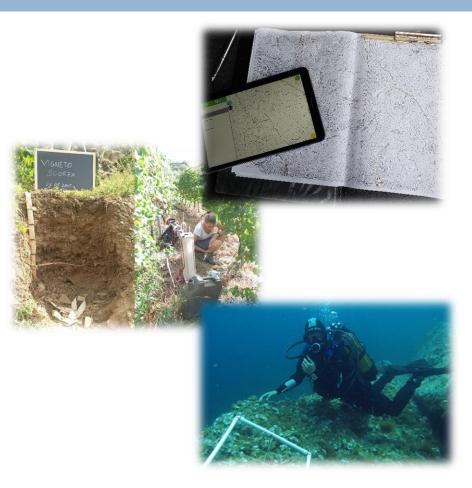


Our services

GeoScape aims to provide cutting-edge services and solutions in terms of:

- Geoenvironmental risk and urban planning consulting
- Digital mapping
- Development of digital platforms
- Mathematical modeling of natural phenomena
- Field surveys and laboratory analyses
- Professional training/refresher courses
- Management of natural and cultural heritage for a sustainable tourism

Contacts: GEOSCAPE SOC COOP Corso Europa 26, 16132, Genova Mail address: info@geoscape.it VAT n.r 02594600997





germina srl

About us

- GERMINA srl is an innovative startup made up of a set of engineers and entrepreneurs with the aim of devising and developing innovative solutions for the cultivation of horticultural and flower species of high commercial value with a low environmental impact.
- The innovative Start Up was established in 2020, and in 2021 it obtained the Spin Off recognition of the University of Genoa.
- The business idea starts from a set of professionals in collaboration with the University of Engineering of Genoa and the Faculty of Agriculture of Sassari.
- The company is made up of four partners, including a professor from the University of Genoa.

Mission

- L'attività principale di Germina srl è rappresentata dalla progettazione, sviluppo e commercializzazione di una Serra Adattiva.
- Si tratta di un innovativo dispositivo e un procedimento brevettato che consente di ricreare le condizioni ambientali ottimali per la crescita di specie vegetali in essa coltivate minimizzando il consumo energetico necessario a tale compito.
- L'ambito di impiego primario della soluzione è quello delle coltivazioni in serra di prodotti floricoli, orticoli e similari.



The product

- The Adaptive Greenhouse is a patented device capable of minimizing the energy consumption necessary for traditional greenhouse crops during the growth phase of the crops.
- The device, which can be applied directly inside existing greenhouses, allows the volume of the environment to be conditioned to be enormously minimized in height: from a few centimeters at the time of sowing up to the maximum height of the crops.
- The result of years of research and experimentation in the field of micro mechanics, electronics and agricultural sciences, the adaptive greenhouse inaugurates a new paradigm for the indoor cultivation of horticultural and floral species for food and cultivation for commercial purposes.

Among the main advantages offered by this device:

- Significant reduction of the energy required for the conditioning of cultivation environments and consequent reduction of production costs and associated environmental impact.
- Lower investment for the creation of a greenhouse by reducing the costs of air conditioning machinery.
- Lower maintenance costs of air conditioning equipment.
- Possibility of powering the adaptive greenhouse also thanks to solar energy alone given the low consumption of operation, eliminating the fate of the consumption.
- Possibility of cultivating species at the ideal temperature for maximum yield without the need to cultivate at a compromise temperature between yield and consumption.



Contcts: GERMINA SRL Viale Galileo Galilei 36 -Carrara (MS) Mail: <u>info@germina.bio</u> VAT n. 01412350454

Energy area

SIT TECHNOLOGIES SRL



pag. 28

SIT_{TECHNOLOGIES}

sit technologies srl

About us

- SIT Technologies srl aims at the industrial exploitation of research results in the field of energy harvesting technologies to improve the performance of power plants.
- The company deals with theoretical and experimental research in the field of advanced energy systems and was born from the experience of the Thermochemical Power Group research group of the University of Genoa, founded in 1998.
- The company structure is currently made up of seventeen members, including 6 professors and researchers from the University of Genoa.
- During 2018 it was set up while obtaining the title of Spin Off of the University of Genoa.

Mission

- The mission of SIT Technologies is to analyze and optimize energy plants to obtain efficient and ecological heat and energy generation systems.
- The company started its activity in 2018 thanks to some collaborations in the field of EU projects and the unique intuition linked to an innovative use of wellknown technologies.



Our services

The main activities of SIT are:

- technological development and production of energy collection systems for the exploitation of any pressure drop of any fluid in systems generally dissipated through rolling valves (for example throttling valves in refrigeration cycles, wastegate in turbochargers).
- consultancy for large power plants, such as combined cycles, to implement heat pump and thermal storage solutions to improve flexibility and efficiency, especially at part load.
- The production activity is closely related to SIT's proprietary technology: a specific regulation on the well-known Tesla turbine. This dedicated variation allows the turbine to be used in particular environments, achieving good performance and high flexibility within a wide range of fluids (also biphasic fluids).
- The intention is to exploit any available pressure loss generally dissipated through rolling valves within a wide range of systems.



0000000

Contcts: SIT TECHNOLOGIES SRL Via XX Settembre 33/10- Genova Mail: info@sit-tesla-technologies.com Tel: +39 010 3352963 VAT n. 02577540996

Health Area



CURA SRL	pag. 31
IO SURGICAL RESEARCH SRL	pag. 33
TESEO SRL	pag. 35

Robotics and AI

cura robotics and Al srl

Who we are

- CURA Robotics and AI srl aims to enhance the technology developed in CARESSES, a multidisciplinary project that developed the first elderly care robot capable of adapting to the culture of the assisted person.
- The CARESSES Artificial Intelligence, integrated with the humanoid robot Pepper developed by SoftBank Robotics (project partner in CARESSES), was proven to help older people in different ways: for example, by reminding them to take medicines, encouraging them to maintain an active life, helping them to stay in touch with friends and family, recognizing emergency situations, or simply helping to lessen the feeling of loneliness through social interaction and conversation.
- The innovative Start Up was established in 2021, obtaining the title of Spin Off of the University of Genoa in 2022.
- CURA was founded by an international team of six researchers who worked together on the CARESSES project, with multidisciplinary skills (robotics, information technology, marketing, computer graphics).

Activities

- CURA's activities are mainly focused on healthcare chatbots and home robots, sectors that are experiencing rapid development thanks to some factors, such as the increase in Internet connectivity, the adoption of smart devices, the growing need for virtual assistance, and the consumer demand for autonomous robotic technology.
- In particular, the entrepreneurial project is aimed at developing products and services to increase the interaction (especially verbal) of robots and social devices, so as to offer, even to simple systems, the possibility of conversing with the user in a culturally competent way, through a Cloud architecture that allows integration with the social interaction features that the device already has.



The product

CURA's core product is a ready-to-use Cloud services platform that allows any device connected to the network (robot, home assistant, or mobile app) to develop advanced (mostly verbal) social interaction. The Cloud platform guarantees any intelligent device (a humanoid robot, a low-cost and small desktop robot, ...) to access a cultural knowledge base and, consequently, to receive information related to the most appropriate behavior to keep (what the device has to say and do) depending on what the sensors perceive and the inputs received by the user.

In parallel, the company also supplies (starting from preexisting robotic solutions) robots for the assistance of the elderly, aimed at improving the quality of the service offered to residents of retirement homes in the face of staff shortages, and to enhance the use of human resources.



Contacts: Via dell'Ombra 8, 16132, Genoa, Italy Tel: 0039 3480667920 Mail: info@ai-cura.com VAT number: 02732580994 Website: www.ai-cura.com

INTRA OPERATING - SURGICAL RESEARCH SEE TO SAVE IO SURGICAL RESEARCH

About us

- IO Surgical Research was born from the collaboration between the Urological Clinic of the Policlinico San Martino in Genoa, in collaboration with the University of Genoa, with Mixura and with Digital Tree Innovation Habitat, and has developed the idea of creating a coherent interaction prototype in real -time between holograms of anatomical structures and live organs, such as kidney and prostate, during robotic assisted laparoscopic surgical procedures.
- The initial implementation phase required the close synergy of medical-surgical and bio-engineering skills. Within the University of Genoa, the established Spin-Off IO Surgical Research sees the DISC and DIBRIS, respectively, structures of the Faculty of Medicine and Surgery and the Faculty of Engineering as the relevant departments.

Mission

The goal of IO Surgical Research srl is the use in Augmented Reality of threedimensional anatomical models, starting from CT and MRI images, creating a realtime intracorporeal navigation system applied to Robotic and Laparoscopic Oncological Surgery.



Our services

Pre-operative phase

• Study and simulation of the intervention strategy through a 3D reconstruction of the patient's organ at an individual level.

Operative Phase

• Maximized effectiveness of the intervention thanks to the use of intracorporeal navigation in augmented reality, taking into account movement in space and deformation of the tissue.

Post-operative phase

• The use of robotic technology allows a high preservation of functionality and a lowering of recurrence thanks to faster and more precise interventions.

Contacts: IO Surgical Resaerch srl Via Byron 14/3 – 16145 Genova Tel . 0108596646 Mail: marco.bressani@mixura.com

The product

- The IO Surgical Research solution consists in the application of an innovative patented technology that solves the problem of real-time coupling of the three-dimensional model (hologram) to the target organ during the surgical procedure.
- In this way, surgeons have an instrument that has never been possessed before, which leads to an elevation of safety standards and oncological outcome as well as a considerable facilitation in specialized training and refresher courses.





teseo srl

About us

- Teseo srl is active in the field of the Ambient Assisted Living (AAL). Our first product, Kibi, is specifically aimed at elderly people, so that they can enjoy their lifelong independence.
- The company was established in December 2015 and was acknowledged by the University of Genoa as a spin-off of in January 2018.
- Our team has a remarkable know-how in relevant enabling technologies (IoT, AI, deep learning, cloud computing, blockchain, H/W design), production management, marketing and sales. It includes, among the others, two university professors, a researcher, and two business angels.
- Teseo received several awards including the Janssen Award as "the best startup" at the BioInItaly 2018 Investment Forum, in the Healthcare & Biomedical section.

Mission

- Teseo's mission is developing advanced AAL platforms for both enterprises and single customers.
- Kibi allows the elderly to keep their independence for as long as possible; permits the family to assist their loved ones, without invading their privacy; provides residential facilities with a tool to better assist their guests.
- The company relies on the collaboration of synergistic partners such as Dotvocal Srl (voice applications), Deepit AG (blockchain and web marketing) and Alfagamma Sagl (operational marketing and sales).



35

The product

Teseo's main activity focuses on the development of plug & play systems, based on artificial intelligence and machine / deep learning techniques, which allow unobtrusive monitoring of the well-being of a person, without interfering with his/her usual behaviours, and automatically alerting relatives or assistance centres in case of need.

The level of the person's well-being is related to the so-called Activities of Daily Living (ADLs).

The ADLs are the daily activities associated with movement, rest, nutrition and personal hygiene.

Detecting these activities makes it possible to measure the well-being index of a person and his/her degree of independence.

- Kibi is composed of a wearable device and some proximity sensors to be placed in the house. Installing Kibi is easy: a guided procedure includes recording some phone numbers to alert in case of need and an essential description of the person's daily activities. It can be used in a single apartment and in care facilities.
- Kibi identifies remarkable ADLs as well as important events such as falls and dizzy spells, and learns the person's habits. This allows to recognize anomalous situations, which may require external intervention.
- Kibi can include a vocal interface for a friendly interaction with the person.
- Data security and integrity are ensured through advanced blockchain-based techniques.



Contacts: TESEO SRL P.zza Montano 2a/1 – Genova Mail: info@teseotech.com Tel: +39 348 420 4419 VAT n. IT02366110993

Activities of daily living (ADL)



Biotechnology and Pharmaceutical Area



BEST SRL	pag. 38
BIO3DMATRIX SRL	pag. 40
SCREENNEUROPHARM SRL	pag. 42



best srl

About us

- BEST S.R.L. starts its activities from the laboratories of the Food Engineering research group, operating at the Department of Civil, Chemical and Environmental Engineering (DICCA) of the University of Genoa, from a joint work with CCS AOSTA SRL, with decades of experience in the agricultural sector, proposing a new idea of symbiotic agricultural product in liquid formulation.
- BEST S.R.L. obtained in 2019 the first prize of the Start Cup Unige, a competition dedicated to business ideas based on innovative proposals generated by research activities conducted within the University of Genoa.
- The innovative Start Up was founded in 2020, and it also obtained the title of Spin Off from the University of Genoa.
- The team is multidisciplinary and highly qualified, consisting of 2 chemical engineers, a food technologist, 1 biotechnologist, 1 surgeon, a doctor in pharmacy, the corporate structure is completed with the important contribution of CCS AOSTA S.R.L.

Mission

- Symbiotic agriculture is a new cultivation process that provides, for the soil, the use of positive microbiology (fungi, bacteria and yeasts) to favor the growth, development of plants and their fruits, soil fertility and its healthiness.
- BEST S.R.L. is developing a solution to the current problems related to the use of products in granular format or in aqueous suspension for symbiotic agriculture. The microorganisms are directly stabilized in a liquid product based on an emulsion consisting of vegetable oils (seed oil, soybean oil, etc.).



38

- The main activity is research and development, production and marketing of products and services with a high technological content.
- In particular, the company deals with the formulation of innovative products for agriculture and plant care in compliance with the environmental sustainability of the design, development and scale-up of production plants for agricultural products.
- Research and development of innovative plants for the production of pesticides, fertilizers and biostimulants and activities in the plant sector, including installation, testing and management of plants and technologies related to the aforementioned activities.
- Biological validation of new products, including the enhancement and validation of by-products and waste from the agri-food industry.

The product

- The technological solution proposed by BEST is able to produce stable liquid formulations for products with a high active biological content. Depending on the operating parameters chosen, more or less concentrated emulsions can be obtained with droplet diameters ranging from a few to hundreds of micrometers. The particle size distributions of the emulsions, produced through the high-speed emulsification technique, are uniform and perfectly repeatable under the same operating conditions.
 - Encapsulated microorganisms can be a monoculture or a mix of different cultures. In the case of monocultures, stabilized emulsions can be obtained for each type of encapsulated microorganism, which can then be mixed in the required doses. In the case of a mix of different crops, a product is obtained that already contains the entire pool of microorganisms in the quantities deemed appropriate.
- The target market is the market for fertilizers, seed preparation, corroborants and biostimulants in the context of the national, European and international agricultural market.

Contacts: BEST SRL Via XX Settembre 33, Genova Mail: info@beststartup.it Partita IVA 02703910998



bio3dmatrix srl

About us

- Bio3DmatriX srl was born in the BioNanoengineering laboratory of DIBRIS, with the aim of introducing to the market innovative and highly versatile kits for neurotoxicity studies.
- In 2019, the proposing team obtained the third prize at the "Start Cup competition" of the University of Genoa. In 2020, the Innovative Start Up was registered, while obtaining the Spin Off title of the University of Genoa.
- The team consists of three women, including a professor, member of the "3R Committee" for the regulation of animal testing, and two research fellows.

- The business activity aims to introduce new products on the market, based on chitosan and other bioactive components, which allow to optimize the use and characterization of 2D and 3D neuronal cell cultures.
- In this way, it is possible to obtain highly versatile *in vitro* models to perform fast, reliable and cheap pharmacological screenings to study the effects of candidate molecules for the treatment of neurodegenerative diseases in the preclinical phase.



The business idea has several advantagies that would simplify and optimize 2D cell cultures and physiologically support the growth of 3D cultures, compared to the alternatives currently on the market.

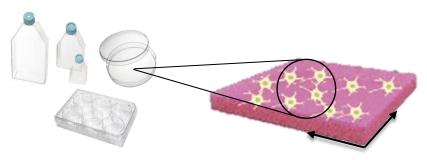
Our services can be summarized as follows:

- Design and selling of user friendly 2D / 3D supports for neuronal cell cultures
- Customization of 2D / 3D supports, according to specific customer requests
- Development of 2D / 3D supports for drug screening applications
- Consulting services: the high experience of the proposing team offers the possibility to provide the most suitable product to the customer's needs and professional support during its use

Contacs: Bio3DmatriX srl Via di San Pietro della Porta 23 Tel.: 010 33 56547 Mail: bio3dmatrix@pec.it VAT 02648130991

The product

 Supports for 2D cultures: pretreated surfaces for adhesion, growth and biological responses of primary neuronal cells and human pluripotent stem cells (h-iPSc)



Supports for 3D cultures: injectable and thermogelling solution for growth and biological responses of primary neuronal cells and human pluripotent stem cells (h-iPSc)





ScreenNeuroPharm s.r.l.

About us

- ScreenNeuroPharm s.r.l is a company working in the Bio / Med-Tech industry.
- Company founded in 2021 and included in the innovative Startups section. In the same year, it is recognized as a Spinoff.
- The team's expertise was developed within the Department of Computer Science, Bioengineering, Robotics, and Systems Engineering of the University of Genoa, with which our team collaborates.
- The three-person team has experience in bioengineering but in various fields of expertise.
- ScreenNeuroPharm was overall and in the Life Science category winner of SMARTCup Liguria 2020, awarded at the National Award for Innovation 2020 (PNI), winner of the Golinelli foundation's Reactor pre-acceleration program and winner of the Futura di GiovedìScienza21 award.

- The mission of ScreenNeuroPharm is to provide physiologically relevant in vitro models to improve the reliability and efficiency of laboratory and pharmaceutical tests.
- ScreenNeuroPharm is a supporter of ethically correct testing that adheres to the ideals of cruelty-free and 3Rs (refine, reduce, replace).



ScreenNeuroPharm's business model includes a variety of services:

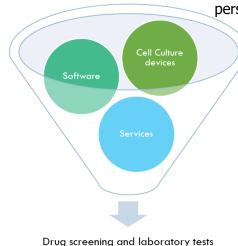
- Customer support for ScreenNeuroPharm products
- Use of ScreenNeuroPharm products on behalf of customers
- Research and development of products
- Collaborations with research institutions and companies

The product

ScreenNeuroPharm creates, produces, validates, and markets:

- in vitro cell culture engineering devices that mimic physiology in the human body. To date, it provides a variety of physical frameworks for constructing three-dimensional, modular, and heterogeneous cell cultures.
- user-friendly analysis tools to simplify analysis operations that are currently time and costconsuming, operator-dependent, and difficult to automate.

All products are developed in partnership with clients, if feasible, to make the ScreenNeuroPharm experience as personalized as possible.



Contacts: ScreenNeuroPharm s.r.l Via Francia 8, Sanremo Tel.: 338 7866053 Mail: info@screenneuropharm.com VAT number 01743530089

Socio-economic Area



CAMPUS CIVICO SRL	pag. 45
CAPITALMONITOR SRL	pag. 47
HOB SRL	pag. 49
OPTIMEASY SRL	pag. 51
SIGMA NL SRL	pag. 53
TETIS INSTITUTE SRL	pag. 55



campus civico srl

Who we are

- Campus civico Srl is a spin-off of the University of Genoa, established in 2023. The company was founded by two sociologists and two architects, professors and researchers from the Department of Political and International Sciences (DISPI) and the Department of Architecture and Design (DAD) of the University of Genoa. The founding members include a research fellow and a graduate student, from the same departments, and two professionals, with consolidated experience in the fields of institutional relations, communication, and participatory processes.
 - The plurality of profiles and skills involved, together with the constant relationship with research, allow Campus civico to respond in an integrated and customized way to the needs of companies and administrations in the field of communication and citizens and stakeholders engagement.

Activities

- Local community engagement is fully recognized as a key factor in the decision-making process for the location and implementation of large-scale works with significant environmental, economic and social impacts.
- Experiences are by now numerous, at the local, national and European levels.
- Campus civico designs and manage participatory processes and communication strategies based on transparency and dialogue with parties
- Campus civico services are aimed at businesses, local governments, and all entities, public, private, and third sector, interested in promoting engagement and dialogue with citizens and stakeholders.



45

The service

- Campus civico facilitates ideas and enables dialogue, in the plurality of situations where it is necessary to promote dialogue between institutions, companies, stakeholders and citizens.
- The interdisciplinary approach makes it possible to develop and conduct participatory and activation processes and to develop and manage communication strategies marked by transparency and constant dialogue with the parties, and to manage the different activities in a unitary form.
- Campus civico provides advice on participation, communication and social innovation and supports the development of projects aimed at public engagement, the production of public goods of a social nature, and the implementation of innovative tools to support open science.

There is no one way of practicing participation and involvement: rather, there is a plurality of methodologies, the use of which may vary depending on the starting point and objectives, the issue at stake, the actors involved. For this reason, Campus civico does not offer a standard service, but it defines the modalities of participation and communication strategies based on the decision-making context and in dialogue with the promoters.





www.campus-civico.it

Contacts: Campus civico Mail: <u>info@</u>campus-civico.it Partita IVA 02873010991



capitalmonitor srl

About us

- Capitalmonitor s.r.l. was founded in July, 2017 in order to bridge the gap between academic research and practice by transferring academic knowledge in accounting and business administration to companies and practitioners. We believe that an intimate connection between academic knowledge and practice in these fields is essential to improve and support key business decisions.
- Building on specific self-made and proprietary software, we propose an alternative approach to problem solving in business practice, based on a strict integration between academic research on financial and management accounting and practical business methods and procedures.
- Our teamwork consists of academics and business consultants, and it promotes the above mentioned innovative and fresh approach. Capitalmonitor s.r.l. has been recognised "University Spin-off" from the University of Genoa since June, 2017.

- Capitalmonitor S.r.l. provides business services to support business decisions, with specific attention to corporate valuation, business plan development and evaluation, management control, and internal auditing design.
- Our services provided also thanks to proprietary software - help companies to tackle the complexity of the competitive context along all the business lifecycle, from start-up to maturity. Specific services help managers and professionals in detecting (and facing) company crisis.



Capitalmonitor s.r.l. supports companies and professionals in tackling issues in the following main areas:

- corporate valuation, business intelligence, management control, and internal auditing;
- derivatives valuation;
- impairment test;
- custom-made consultancy services.

These services are provided also with internallydeveloped software.

Contacts: CAPITALMONITOR SRL Piazza Rossetti 3c/1 - Genova Mail: info@capitalmonitor.it VAT n. 02480430996

The product

Capitalmonitor s.r.l. has incorporated the methodologies adopted in a wide range of software products. Our main software solutions are:

- Cash flow forecast (CFF), which enables to make cash flow forecasts, preventing future liquidity problems especially for SMEs;
- Financial alert (FIN.AL), that enables to monitor and control key financial drivers in order to prevent company crisis;
- **Nibbio**, that enables to evaluate the nature, the risk, and the value of derivatives, thus providing information materials required by both the Italian GAAP (OIC) and IFRS.





hob srl

Who we are

- HoB s.r.l. was founded in February, 2022 in order to bridging the gap between academic research and practice in artificial intelligence (AI). Specifically, leveraging the experience of researchers to design AI-based solutions, HoB has the ambition to make AI accessible beyond the boundaries of its intrinsic complexity.
- By adopting a proprietary web portal, we propose an innovative approach to AI-based solutions in several fields: AI algorithms, DICOM imaging, and data analysis.
- Our team consists of scientists and software developers, and promotes an interdisciplinary methodology taking advantage of the diverse scientific background of the professionals involved. HoB s.r.l. has been recognised a "University Spinoff" by the University of Genoa in December 2022.

Activities

HoB S.r.l. offers solutions to support companies to address the data analysis problems:

- HoB Consultancy
- HoB Studio, a web-based platform that allows the development, testing, and leveraging AI-based algorithms;
- HoB Medical, a zero-footprint DICOM viewer with advanced features (CT-PT fusion and MPR)
- HoB Vet, a HoB medical extension tailored to the veterinary environment
- Hob Studio Network and Research Extension, to allowing the sharing of DICOM studies within the HoB network and to even offer the possibility to code customized AI algorithms within the framework of DICOM-based studies.



49

HoB s.r.l. helps companies to address issues in the following main areas:

- Consulting companies to best leverage the data they already own.
- ✓ General algorithms design, including AI
- ✓ Supporting research labs. Our web platform provides a ready-made set of software tools that are functional to the research goal.

Our solutions are delivered through our proprietary web platform.

Contacts:

HoB s.r.l.

Via Cialli 1A/A Genova, Italy

Mail: hob-srl@legalmail.it

VAT Number: 02801540994

Our softwares

Our software offering includes:

- ✓ HoB Studio a general purpose, web based platform to code, test and run AI algorithms.
- ✓ HoB Medical a zero footprint DICOM viewer designed to leverage cloud architecture.
- ✓ HoB Vet a zero footprint DICOM viewer optimized for veterinary environment.





OPTIMeasy

About us

- OPTIMeasy, founded in January 2021, deals with the optimization of operations mainly in the Logistics and Transport sectors.
- It is registered as Innovative Start Up in the special section of the Register of Companies and is Spin Off of the University of Genoa since May 2021.
- OPTIMeasy is based on the great passion of the two founders who, through the integration of transversal skills including mathematics, optimization, logistics, transport and economics, are confident of being able to provide a contribution to companies for supporting them in problem solving and cost reduction using decision theory, operations research and optimization approaches.

Mission

OPTIMeasy offers a simple approach to obtain decision support systems for bringing a consistent competitive advantage using operations research and optimization techniques, with the aim of supporting companies in the efficient and organized management of processes and decisions.



OPTIMeasy aims to offer all those activities necessary for the development of decision support systems based on operational research and optimisation techniques in order to guarantee a comprehensive approach to the customer:

<u>Analysis</u>

Comprehensive analysis of processes, starting from their definition, through the study of the activities that make them up to the identification of the most appropriate improvement approach

Optimization

Study and development of a solution approach aimed at optimizing the decisions and/or operational processes defined and analysed

Scenario analysis

Construction of comprehensive scenario analyses to assess different possible alternatives

Key performance indicators

Support in defining appropriate Key Performance Indicators (KPIs) for monitoring and evaluating improvements

Decision suppport systems

Designing of decision support systems based on the developed optimization approach and to be integrated into the customer's business process

Project management

Management of innovative projects related to the development of the most suitable tools for improving and optimising business processes

Contacts: OPTIMeasy Srls Via F. Vivaldi 5, 16126 Genova Tel.: +39 349 3554024 Mail: info@optimeasyway.com VAT n. 02721840995





www.optimeasyway.com

Σ'n

sigma nl srl

About us

- Sigma NL srl was founded with the purpose of transfer of the socio-economic-cultural research, innovation in products, services and consulting to high technological value to companies, associations or public bodies.
- In 2017 it was established obtaining the Spin Off title of the University of Genoa.

- The business idea is focused on:
- development of innovative models, methodologies and advanced technologies in the socio-economiccultural field;
- software tools and algorithms for the assessment of risk management, assessment and business organization, energy market and utilities;
- consulting and validation of innovative financial and credit procedures.



- To develop innovative models, methodologies and advanced technologies in the socio-economic-cultural field.
- Social ROI (S-ROI) & impact evaluation.
- RIA (Regulatory Impact Assessment).
- CSR (Corporate Social Responsibility), One Report, Integrated Reporting <IR> with GRI indicators
- NFD (Non Financial Disclosure) DIR/2014/95/CE and D.lgs. 254/2016.
- Develop innovative methodologies, new software tools and advanced algorithms for the assessment of risk management, risk assessment and business organization (d.lgs. 231/2001; SA8000; ISO 37001; ISO 31000; ISO 31010; ISO 26000 and PdR UNI 18:2016; ISO 37101; ISO 19600; ISO 22301).
- Develop evaluation systems and data collection in the socioeconomic and environmental impact.

Contacts: SIGMA NL SRL Piazza Corvetto 1/4 – Genova Mail: info@sigmanl.it Tel: +39 393 6044422 VAT n. 02476130998

- Collaborate with institutions and companies in the field of legislation and research, data collection and processing in terms of corporate social responsibility and social innovation.
- Provide advice on innovative issues and solutions in the financial and credit sectors.
- Supporting institutions and companies in the definition and validation of innovative regulatory procedures and strategies in the economic-financial field.
- To develop advanced models, methods and innovative tools for the energy and utilities markets with particular attention to sustainability and resilience.





tetis institute srl

About us

- Tetis Institute srl is an entrepreneurial initiative with a high innovation content for the exploitation of scientific research results.
- Tetis is a consulting company born as Spin Off of the University of Genova (Italy) in 2018.
- The co-founders are professors of Chemical and Process Engineering and Economics.

Mission

Tetis has a great deal of experience in consulting on Climate Management, Ecodesign, Life Cycle Assessment, Environmental Labels and Circular Economy, boasting its roots in CESISP (interuniversity Centre for the Development of Product Sustainability).



Tetis carries out specialist consultancy for companies, associations or public bodies, national and international organizations and institutions on:

- Sustainable Return on Investment (SROI)
- Life Cycle Assessment and Life Cycle Costing (LCA-LCC)
- Type 3 Environmental labels (EPD, PEF)
- Product Category Rules (PCR)
- Carbon Management and Trading
- Circular Economy strategies and programmes

Tetis has the following capabilities and experiences:

- Social Return on Investment and Regulatory Impact Assessment (Private companies and Public Administrations)
- Climate action and plans (Participation to UNFCCC COPs, including COP21, as RINGO; Plans of 5 Cities)
- GHG emissions inventory (Milano EXPO 2015, Campus, Public Administrations, more of 500 EU-ETS plants, 20 CDM, eCO2care VER Registry manager)
- Environmental labels (more than 50 EPD, 20 PCR, member of the Technical Committee of the International EPD System)

Contacts: TETIS INSTITUTE SRL Via Gropallo 4/19 - Genova Mail: info@tetisinstitute.it VAT n. 02530640990



www.tetisinstitute.it