

Tecniospring 2021: Researcher, find a position here

Tecniospring Industry 2021
25th February 2021

ACCIÓ



Generalitat de Catalunya
Government of Catalonia



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 801342

Tecniospring
INDUSTRY

Health and Life Sciences vacancies



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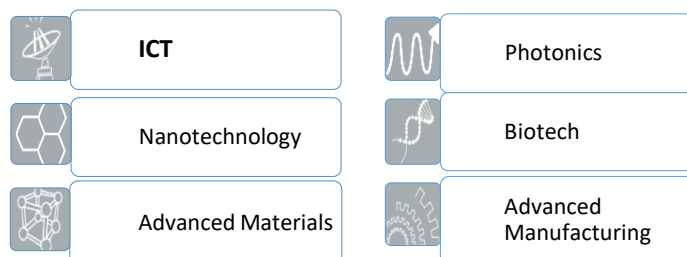
Tecniospring
INDUSTRY

University of Barcelona & Corporate Health International

Sector



Technologies



Artificial Intelligence for Endoluminal Image Classification

A WCE is vitamin-size capsule that contains a camera and an array of LEDs powered by a battery, to record its trip along the gastrointestinal tract. Although the WCE is really attractive from a clinical perspective, it still requires Artificial Intelligence in order to reduce the complex and time-consuming screening by physicians. The goal of this Project is to Artificial Intelligent solutions to help the physician with the diagnosis.



Researcher's Profile

- PhD degree in Computer Science, Mathematics or a closely related field.
- Strong background in Data Science/Machine Learning. Previous experience in deep learning and strong programming (Python/Tensorflow/Pytorch) skills are a clear advantage.



Contact Person

Santi Seguí
Santi.segui@ub.edu

Cytes Biotechnologies, SL

Cytes is a biotechnology company designed with the aim of managing, coordinating and providing scientific services to researchers, biotech companies and pharmaceutical laboratories worldwide. Currently, it performs its activity by offering services based on the isolation of human and animal liver cells, as well as cell culture media for *in vitro* models aimed at the scientific community.

Sector



Health and Life Science

Technologies



Biotech

ACCIÓ



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CYTES
BIOTECHNOLOGIES S.L.

00 : 03 : 00

Incoming



Human hepatic co-culture pools

The candidate will face the challenge of investigating and defining the appropriate protocols and techniques essential to develop a new product consisting in a pool of primary human liver cells from different donors that includes hepatocytes and non-parenchymal cells in different combinations of them, determining their concentrations and the implementation of the best technologies available. Pools will be generated by using a mix of individual donors, to recreate a heterogeneous population. If succeeded, its generation will facilitate reproducibility in hepatotoxicity, pharmacology and physiology studies by minimizing differences attributable to inter-individual variation. Thus, the product generated will not only be a state-of-the-art product, but will also have the necessary characteristics to significantly reduce the resources and time used in pharmacological or biomedical research.



Researcher's Profile

PhD in Biosciences (biology, biomedicine, biochemistry, biotechnology, etc.). With in-depth knowledge in molecular biology and cell culture; specifically, with a research background based on human liver and hepatic cells. Previous experience working with NASH, NPCs and liver pools will be an asset, and also *in silico* knowledge.

A demonstrable research track record and publications related to development and research in the field of hepatotoxicology and liver models will be considered. In addition, fluency in English and the ability to work in a team are essential.



Contact Person

AINA SORIA SALA
asoria@cytesbiotech.com

Tecniospring
INDUSTRY

Gate2Brain is a biotech company focused on the development of therapeutics that efficiently cross biological barriers such as the blood-brain barrier. We pursue our goals using a radically innovative peptide-based patented technology platform for the delivery of therapeutics. Our platform is based on three families of peptide shuttles that improve the biopharmaceutical properties of cargoes such as small molecules, peptides, nanoparticles, proteins and antibodies in vitro and in vivo when conjugated to them. These have been the result of more than 15 years of research and development in the IRB Barcelona and the University of Barcelona. Gate2Brain (G2B) holds the license of the three families of peptide shuttles and the first therapeutic product using this technology platform: G2B-001.

G2B-001, our flagship product, is a first-in-class therapeutic candidate for solid tumors that are difficult to treat via anticancer drug delivery. G2B-001 is aimed mainly at the treatment of rare pediatric solid tumors of the central nervous system (brain). Those tumors suitable for treatment with our technology include pediatric high-grade gliomas, such as diffuse intrinsic pontine glioma (DIPG). Pediatric extracranial tumors for which G2B-001 has potential application include Ewing sarcoma, rhabdomyosarcoma and neuroblastoma. This product is being co-developed with Sant Joan de Déu Pediatric Hospital (HSJD).

We offer a position at Gate2Brain to enroll in our multidisciplinary international collaboration with two international renowned institutions encompassing Nanotechnology and Chemistry at Technion (Haifa, Israel) and Pharmacology and Oncology at Sant Joan de Déu Pediatric Hospital (Barcelona, Spain).



Improving Gate2Brain's Delivery Systems using Nanotechnology

This project deals with the exploratory use of nanotechnology to improve our G2B-001 candidate. The Researcher will be incorporated in Gate2Brain's team and will act as a bridge between Technion in Israel and St. Joan de Déu in Spain. He/She will be responsible to develop and characterize the nanosystems at Technion, learning the Technion techniques and then transferring and applying them to Gate2Brain and St. Joan de Déu in Spain. For Gate2Brain this is a Key person for creating and incorporating new knowledge into the company and developing new, more evolved products, creating new intellectual property.

In the first part at Dr. Alejandro Sosnik's Research Group at Technion (Haifa, Israel), a world leading expert in Nanotechnology and Pharmaceutical Sciences: Nanotechnological approaches and other non-viral nanovectors will be developed, characterized and evaluated.

In a second part at Dr. Angel Montero-Carcaboso Research Group at Pediatric Sant Joan de Déu Hospital (Barcelona, Spain), a world renowned group working in the field of Pediatric Tumors: The evaluation of the nanosystems in vitro and in vivo in patient-derived animal models will be performed.

During all the time the researcher will participate at all activities of Gate2Brain, this will enrich his/her knowledge in the entrepreneur ecosystem.



Researcher's profile:

We are looking for a PhD in Health and Life Sciences with 2 years of demonstrable experience in: (1) Experience in pharmaceutical nanotechnology, production and characterization of nanosystems, miscelles,... in the field of drug delivery, (2) Experience in drug chromatographic analysis and mass spectrometry techniques, (3) Drug efficacy test, in vitro and in vivo (in laboratory mice), (4) Immunohistochemical techniques and molecular biology and (5) Establishment and management of animal models of xenografted tumors derived from patients. The title of animal experimentation will be valued. A previous postdoctoral experience will be considered. Languages: English (Advanced Level), other languages will be valued.

Sector



Health and Life Science

Technologies



Nanotechnology



Advanced
Materials



Biotech



Contact person

Dr. Meritxell Teixidó

meritxell.teixido@gate2brain.com

KYMOS is a Catalan company with a strong European projection having the headquarters at the Parc Tecnològic del Vallès (Cerdanyola del Vallès) and two subsidiaries: Pharmaprogress in Ancona (Italy) and Prolytic in Frankfurt (Germany). The company is dedicated to the development of **high value services** for research, development and quality control of synthetic drugs and biologicals. It develops its activities in a quality environment defined by GMP and GLP regulations. It has developed an intense growth in the biologics activities focused basically in the development of assays of proteins and glycosaminoglycans for CMC, non-clinical and clinical studies.

Kymos is equipped with last generation instrumentation. Specifically in biologics : LC-MS/MS, HPLC and UPLC, CZE, cIEF and icIEF, ELISA, RIA, ECLA, CBA, flow cytometry and label free assays. Prolytic perform assays of RT-qPCR for DNA and RNA.



New Assay Platform for Advanced Therapies Medicinal Products

To develop assays for the characterization of gene and cell medicinal products: protein capsid of carrier virus (Adenovirus, AAT, lentivirus, etc.), the DNA cargo and cell properties. Examples of the assays to be developed: aggregation, empty capsid vs intact viral particles, charge heterogeneity, transgene expression, characterization of the viral proteins, potency, residual DNA, cell morphology, isoenzyme analysis, mycoplasma, consistence of DNA code, gene copy number, DNA fingerprint, compendial methods, etc.



Researcher's Profile

Ph. D. or Master degree with enough research experience in biology, biotechnology, organic chemistry, etc..

Proficiency in English. Good knowledge of advanced experimental techniques . Knowledge in the Advanced Therapies Medicinal Products specifically in gene and cell therapies. Ability to work independently and in collaboration with multidisciplinary international teams. Open minded. Knowledge to work in a regulated laboratory environment.

Sector



Health and Life Science

Technologies



Biotech



Contact Person

Carles Celma (Scientific Director)

ccelma@kymos.com

Q&A

Chemistry, energy, resources vacancies

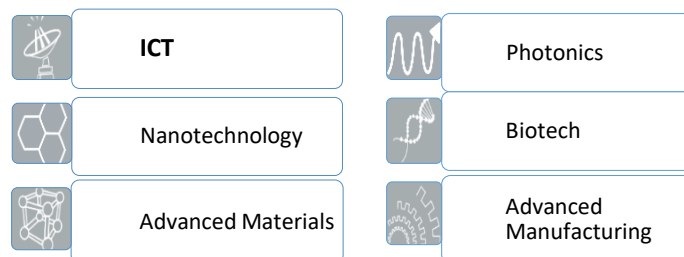


Logistics Marketplace

Sector



Technologies



Tracking and optimization of merchandise

We want to develop a real-time cargo groupage and tracking system to make the transport of goods more efficient and facilitate the exchange of goods between carriers within the European community to maximize, make more efficient and monitor individual cargoes in real time.



Researcher's Profile

Looking for one research engineer to develop and to implement our route optimizer and trace GPS tracking project.



Contact Person

Jordi Arribas
jordi@leadmee.com

TREELLUM TECHNOLOGIES is a very recent constituted technology based company formed in 2020 with the intention of commercializing cutting-edge technological solutions in the form scientific instruments for research and development in the fields of chemistry, and more particularly in the fields of photochemistry, electrochemistry, catalysis, flow chemistry and chemical synthesis in general.

TREELLUM TECHNOLOGIES leverage its know-how, technology and IP to supply chemical R&D laboratories worldwide with best-in-class scientific instrumentation as it is its first product: parallel photoreactor.

Sector



Chemistry, energy and resources

Technologies



Photonics



Advances
Manufacturing



Innovation in photoreactors and automatization for sustainable R&D

Fabricating of new prototypes of photo-reactors and automatization engines for industry application and manufacturing, to adapt our commercial reactors to larger scales.

In addition to the reactors, also the researcher will be involved in the generation of several accessories/app designed by Treellum.



Researcher's Profile

Degree in electronic engineering, with good knowledge of English (written and spoken).

Experience in design and development of embedded microcontrollers.

Knowledge in 3D designing (e.g. SolidWorks and CAD)

Experience with designing digital circuits, firmware apps, microprocessor-based boards, serial communications, python and robotics.



Contact Person

Dr Esther Alza

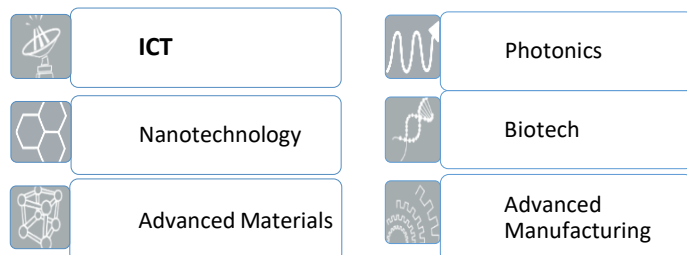
careers@treellumtechnologies.com

AI based solutions for Performance Monitoring, Diagnose, Prognose and Control of **renewable energy assets**

Sectors



Technologies



Smart Cast Services

Develop scalable algorithms that can be applied over a fleet of multiple power plants located worldwide..

Work on failure indicators, feature extraction based on supervised, semisupervised and ensemble learning.

Product development, Integration on client platform. 3 Journal publications, team support.

Researcher's Profile

Pasionate, Outstanding and team

Ph.D. Computer Science

Python, mySQL, SQL, Mongo, Docker

Nonsupervised and Semisupervised knowledge

Experience in renewable (PV, wind)

Contact Person

Jordi Cusidó

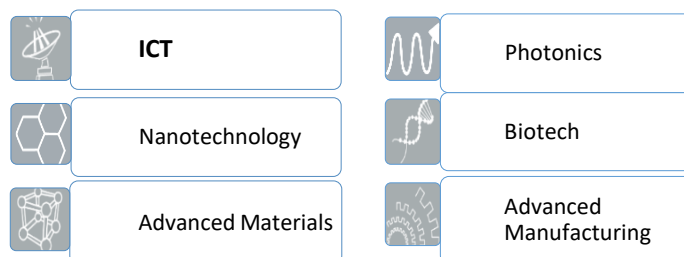
Jordi.cusido@smartive.eu

AI based solutions for Performance Monitoring, Diagnose, Prognose and Control of **renewable energy assets**

Sectors



Technologies



Smart Cosmos

Develop scalable algorithms that can be applied over a fleet of multiple power plants located worldwide..

Work on text mining algorithms to extract features and labels for algorithm validation and training.

Support on Data Architecture and result visualization.

Researcher's Profile

Pasionate, Outstanding and team

Ph.D. Computer Science

Python, mySQL, SQL, Mongo, Docker

Text mining, Distributed Database, Data Architecture

Experience in renewable (PV, wind)

Contact Person

Jordi Cusidó

Jordi.cusido@smartive.eu

INDRESMAT SL

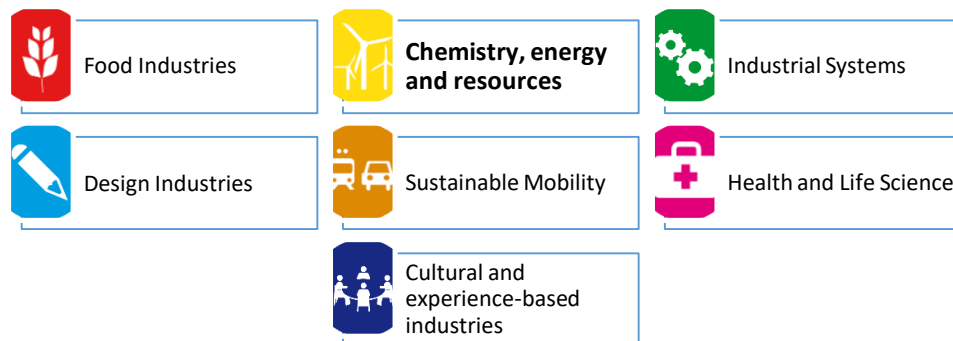
Polyurethane insulating products manufacturer



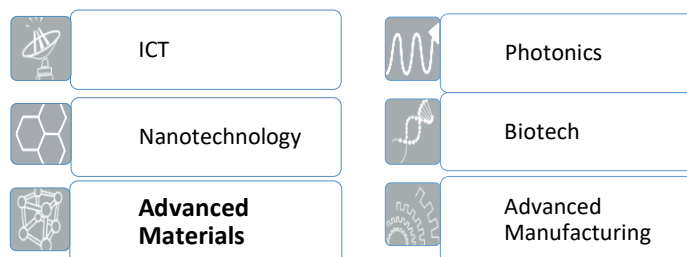
00 : 03 : 00

Incoming

Sectors



Technologies



Bio-PUR - Biobased polyurethane insulation foams with advanced properties

Novel polyurethane materials for KLIMA-PUR (highly energy efficient frame for windows & doors) and for SAFE-PUR (highly fire safe insulation foam) are being developed at INDRESMAT including biobased raw materials to reduce the CO2 emissions of buildings and decrease their embodied C-Footprint. To achieve our goals, we are interested in an experienced R&D team member to develop and industrialize our products.

Researcher's Profile



Chemist, polymer chemist, materials engineer or science-technologist with experience in polyurethanes, thermoset polymers with industrial background in R&D and manufacturing. Positive thinking, proactive mindset and highly interested on construction materials and sustainability to fight Climate Change.

Contact Person

Pablo R. Outón
info@indresmat.com

Bamboo Energy

Bamboo Energy is a recently created start up providing advanced technological solutions to monetise demand management and flexibility from asset portfolios.

Bamboo Energy aims to accelerate the energy transition, democratize the access to cleaner and cheaper energy by providing ways to monetize the flexibility of energy assets and the integration of increasingly renewable energy sources.

Sector



Chemistry, energy and resources

Technologies



ICT

bambooenergy



00 : 03 : 00

Incoming



Flexible Energy Community

Boosting **Energy Communities** by enabling **maximum cooperation and energy sharing** and allowing them to actively **participate in energy markets**. The objective is to develop a software using blockchain technology that combined with current Bamboo Energy Platform will enable Energy Communities creation and operation.



Researcher's Profile

Post doc or senior engineer in computer science or information systems. Background and experience as blockchain engineer will be beneficial. Knowledge in energy systems, distributed energy resources will be beneficial.



Contact Person

Alex Gomar

Agomar@bambooenergy.tech

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Tecniospring
INDUSTRY

Q&A

Sustainable mobility vacancies



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Tecniospring
INDUSTRY

Future Fit Engineering

Product design and development



FUTURE FIT
Product design & engineering

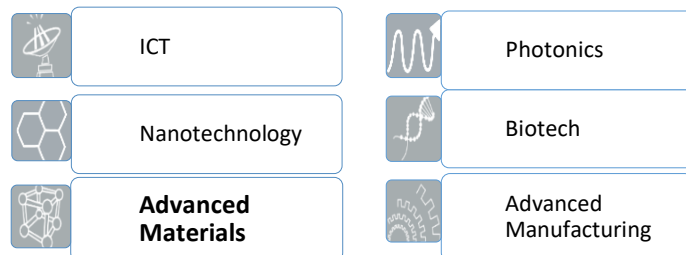
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Incoming

Sectors



Technologies



Bicycle transmission design and optimization

Design and engineering of a shaft drive transmission optimized for advanced materials. Starting from the project specification the goal is to design a bicycle transmission system based on gears. Future Fit already knows all the project specification and we need to design a transmission that fulfill the function requirements. Starting from the specification we want to design and calculate the transmission, After that we will manufacture and test, We are going to iterate the process n times to get to the best design.



Researcher's Profile

We are looking for a PhD mechanical engineer with proven experience in spiral and hypoid bevel gear design and optimization.



Contact Person

Andrea de Luca
andrea@futurefitengineering.com

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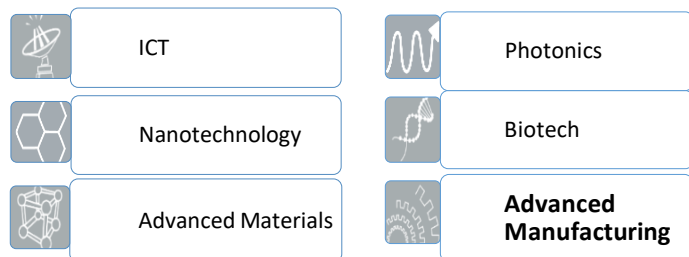
Tecniospring
INDUSTRY

Hydrogen Trucks

Sectors



Technologies



Fuel cell

Research and development of special BOP & Fuel Cell for FCEV heavy duty vehicles.



Researcher's Profile

Deep experience in Fuel Cells concept, design & development.



Contact Person

Xavier Ribas
xribas@evarm.com

In Acisa we design and integrate technology to offer complete ITS and Smart City solutions along Europe and Latin America.

Sectors



Sustainable Mobility

(ITS, Smart City)

Technologies

ICT

(5G, V2X, AI, SDN, ORQUESTRATION,
CLOUD/EDGE COMPUTING, SIMULATION)



5G V2X SDN

Develop mobility services into edge infrastructure. Current services we develop are traffic light control, image processing, IIoT, connected vehicle (V2X)

Services will be seamlessly integrable into incoming 5G telco infrastructure like 5G MEC or fog nodes.



Researcher's Profile

Knowledge of V2X/C-V2x standards. Experience on real pilots, or simulation (SUMO, AINSUM, VISSIM) will be appreciated.

Research background on 5G open source edge technologies (Akraino edge stack, Open Stack, SDN controllers, kubernetes, ONAP, ...)

Research background on deploying distributed applications over software defined networks, AI for network predictive maintenance , optimization and distribute workloads.



Contact Person

Name Joan Iglesias

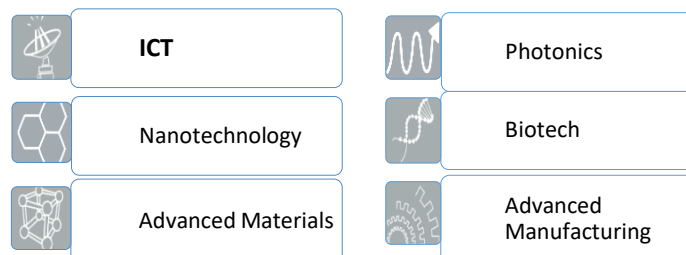
Email Joan.Iglesias@acisa.es

Accurate and affordable navigation

Sectors



Technologies



Accurate navigation for LBS

The main focus of this position will be the development of navigation algorithms for consumer devices such as smartphones. These devices are challenging in terms of the quality of measurements (not only GNSS raw measurements but also inertial sensors) as well as the environment in which these devices operate (urban canyons with high multipath and indoors).

In addition, the LBS market represents more than 50% of the total market share of the GNSS sector. Therefore, all developments and techniques developed in this sector are prone to have a very high return on investment.

Researcher's Profile

We are looking for the following requirements for this position:

- Degree in a STEM discipline
- Deep understanding of GNSS and navigation technologies
- Good understanding of statistical modelling and Kalman filtering
- Programming languages (C, Python) and Software development (git)
- (optional but highly desirable) Experience processing inertial sensor data

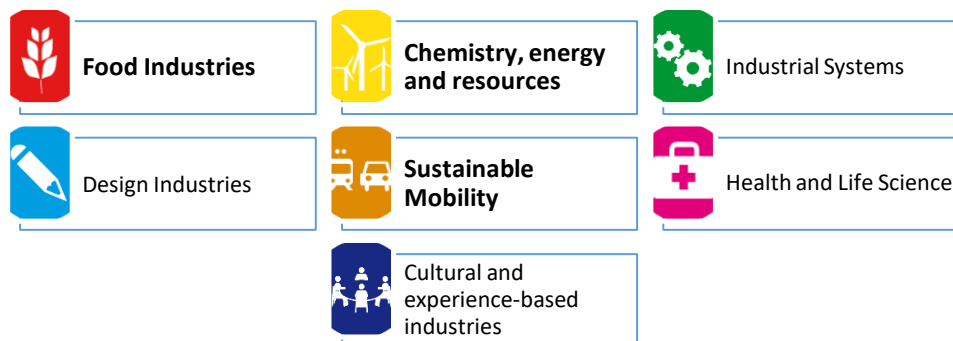
Contact Person

Miquel Garcia, PhD

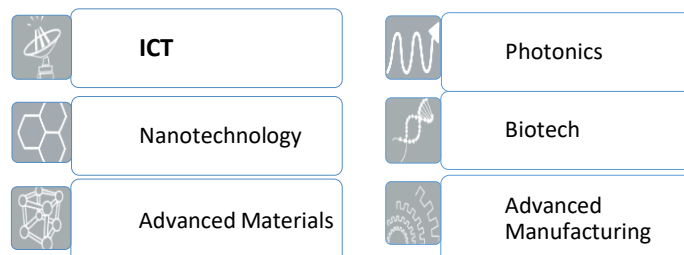
miquel.garcia@rokubun.cat

Building AI models to analyse satellite images to develop indices for decision making.

Multisectoral approach



Technologies



Archive of pre-trained NNs for EO

We propose to build an archive of NN models specially designed for EO applications. These models will be pre-trained on the previous datasets, updated with datasets with reported metrics, and made available to download and integrate in Pytorch, Tensorflow with one link.



Researcher's Profile

- Fluent in Python and its data science ecosystem (Numpy, Pandas, Jupiter Notebook, ...)
- Familiarity with data bases (Firestore, MongoDB)
- Experience with Machine Learning and/or Deep Learning frameworks (Scikit-learn, Pytorch)
- Experience with EO python packages (GDAL, rasterio, xarray, ...) is valuable but not necessary



JuanB. Pedro - EarthPulse CTO

Juan B. Pedro
juan@earthpulse.es

Q&A

Design Industries and Industrial Systems vacancies



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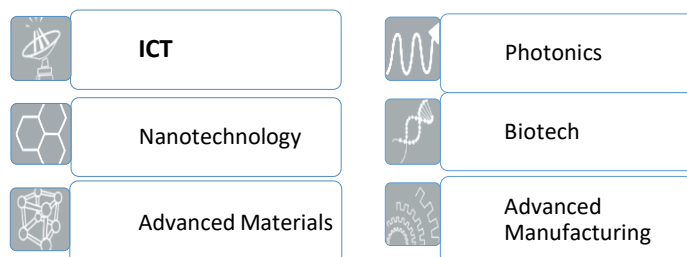
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INDUSTRY

Supercomputing for Natural Hazards.

Sectors



Technologies



Cat Modeling for Insurance

Provide commercial solutions capable to evaluate and mitigate the impact of natural hazards, improving the management of risk for clients across multiple industries.

Researcher's Profile

We're looking for individuals who are keen on applying their natural hazard expertise and excellent statistical to develop innovative and disruptive risk assessment solutions for our clients in the diverse insurance world.

Contact Person

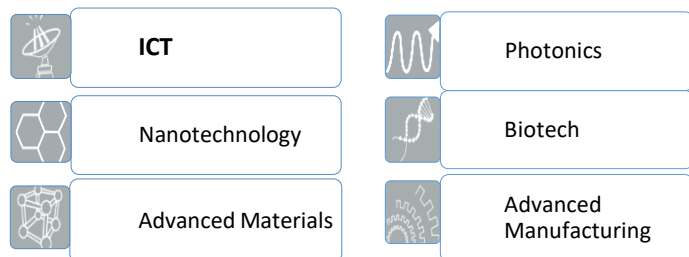
Aina Heras (HR)
hr@mitigasolutions.com

Supercomputing for Natural Hazards.

Sectors



Technologies



Mitigate Wildfires

We believe the future is not going to be predicted by looking at the past. Thus, we are combining state of the art climate science research and data with optimized high performance computing algorithms to build models that forecast the impact of extreme weather events with the intention to make the world more resilient against natural hazards.

Researcher's Profile

We are looking for individuals who are keen on applying their computational expertise, have passion for natural hazards and excellent statistical knowledge to develop innovative and disruptive risk assessment solutions, from a perspective of the design and development of top-quality software to be run in HPC environments.

Contact Person

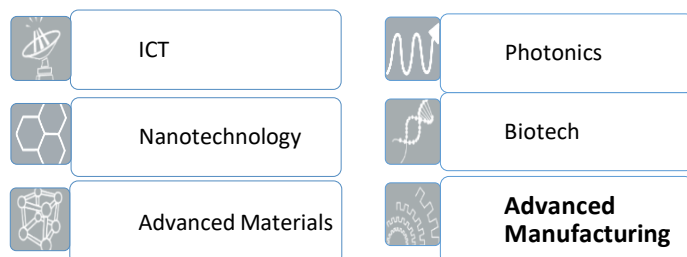
Aina Heras (HR)
hr@mitigasolutions.com

We design and manufacture mobile robotics for our customers needs.

Sectors



Technologies



Autonomous Navigation Technology

The target of the project is to develop an autonomous navigation system based on conditioned areas. The actual solutions on the market are based on pure SLAM navigation algorithms (free navigation). This solutions are very flexible in chaotic environments but lack robustness for industrial environments.

Researcher's Profile

Strong Technical profile
Experience with navigation algorithms and mobile robots
Industrial communications protocols: Ethernet, TCP/IP or similar
Python, C++ programming or similar

Contact Person

Pere Padrós
Pere.padros@kivnon.com

Societat Orgànica

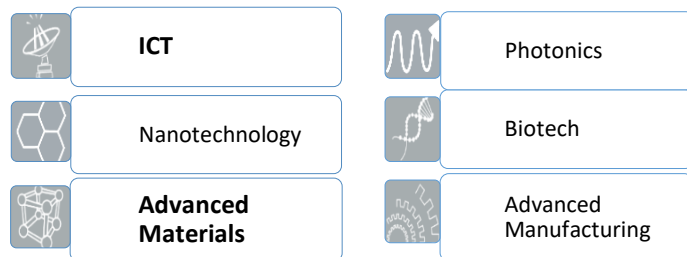


Societat Orgànica is a professional cooperative that works in the field of sustainable building. With a team composed of experts from 5 countries, since 2004 we are providing services in the fields of technical consulting, training & education, communication, R&D, and green building.

Sectors



Technologies



00 : 03 : 00

Incoming



R&D+i in urban planning and computing

The project will be oriented towards the development of innovative consultancy services in parametric design and sustainability evaluation at urban, neighborhood and outdoor spaces.



Researcher's Profile

Experience in urban planning, urban design and definition of outdoor spaces are sought. All this must be linked to modeling and analysis of sustainability using computer tools. Other capacities: adaptation, autonomy, creativity, team collaboration, office and remote work.



Contact Person

Gerardo Wadel, founding partner
gwadel@societatorganica.com

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Tecniospring
INDUSTRY

Q&A

Contact us

