



SPACE ENDEAVOUR TECH GAMES

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THE TECH GAMES

Over the past 8 weeks, Space Endeavour has accelerated 13 space tech startups pioneering technologies across verticals. From start-ups that rely on Artificial Intelligence and Big Data solutions for real time, resilient macroeconomic forecasting, to companies that identify and detect oil pollution through orbiting satellites or cargo optimisation using Quantum Computing technology, our cohort has a range of distinctive technologies and market-ready solutions.

Whether you are a corporate looking for new technologies to give you a competitive edge or an investor looking for the next big thing, we look forward to sharing the accomplishments of our founders at the **IoT Tribe Space Endeavour Tech Games**.

We are privileged to work alongside our Space Endeavour partners, the European Commission and the mentors who have freely given their time and expertise to support the teams.

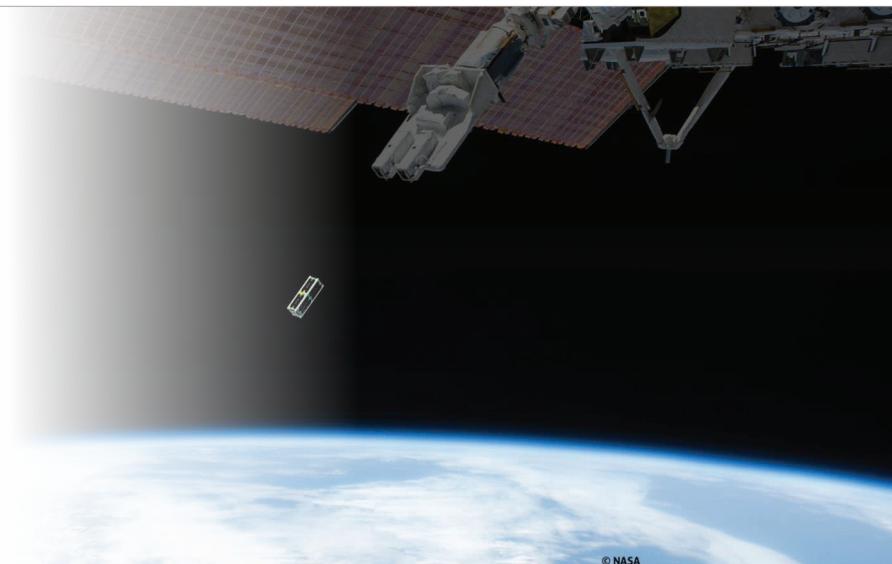
We look forward to the pitches today and hope that you will enjoy hearing about their businesses, as much as we have enjoyed supporting them.

Tanya Suarez
CEO & Founder
IoT Tribe



THE ASK:

Open to **clients** and **industry partners** for the first vdes nanosatellites constellation in 2 years.



TAKING BUSINESS TO THE FINAL FRONTIER ALÉN SPACE, BE THERE.

Alén Space, founded in 2019, is a New Space start-up specialised in full stack nano-satellite solutions.

Our aim is to democratise Space by eliminating the friction involved in designing and launching Space missions for industrial applications, from monitoring assets across difficult domains, to future explorations of new energy sources. Our reconfigurable satellites provide Space as a Service in a way that is reliable, agile, flexible and 10x cheaper than existing solutions on the market.

We have already launched 4 missions with a 100% success rate, versus an industry standard of 75%. We have worked with ESA, NASA and other leaders in the European Space tech arena. And now we are ready to work with you.

Alén Space has received 1M€ in VC funding and 400K€ in public funding.

TEAM



Guillermo Lamelas Co-founder & CEO

Guillermo Lamelas worked at Telefónica as the Global Head of Acceleration Programmes in Wayra. With an MBA from INSEAD, his role in Alén Space is to guide the business vision and apply his experience in international management experience.



Alberto González Co-founder & CTO

Alberto González, CTO, 12 years of experience in the field of nano-satellites. Alberto is the key person to lead the technical operations of the company and perform to the highest technological standards.



Antonio Vasquez Co-founder & BD

Antonio Vázquez, BD, has worked across the lifecycle of a satellite from systems engineering to AIV and operations. With a Master in finance, he adds a market and finance savvy edge to his core engineering expertise.



THE ASK:

Raising **€500k**

Pilot projects with customers: ports, food industry, policy makers and regulators, esg-data providers, auditors and sustainability cxo's

RADICALLY INCREASING TRANSPARENCY OF THE RISKS OF CLIMATE CHANGE ORGANISATIONS AND COMMUNITIES

CarbonSpace was founded in 2019 with a mission to radically increase the transparency around how we track greenhouse gas emissions as organisations and communities. The company is harnessing the power of the best available technology to help tackle the defining challenge of our times, by providing precise, visual, verified data on carbon footprint, that will be accessible and easy to act upon.

Our proprietary AI technology core leverages a mix of satellite and ground data to provide carbon footprint estimations with up to 30-meter spatial and up to 1-week temporal resolutions. The platform automates and gradually reduce costs of carbon footprint calculation, risk assessment and regular reporting services enabling us to target a part of Sustainability market worth of USD 36+ billion. The company has received over 10 pilot project requests from potential customers and is currently working with the European Space Agency.

TEAM



Oleg Demidov Co-founder & CEO

Serial tech entrepreneur, founder of several startups including Navigine Inc. that raised over \$1,5M of venture funding from the US and EU investors - Oleg was responsible for international business development launching operations in New York and Berlin offices. 12+ years of experience in international business development and top-management consulting, including Droege & Comp, Pattern Group, etc. Ph.D. in satellite and inertial navigation at MSU.



Alexander Morozov Co-Founder

Alexander Morozov has 12+ years of experience in Energy and Sustainability domains, including EnBW, Energy Brainpool, German Federal Ministry for Economic Affairs and Energy. Master of Science in Engineering Management at the Technical University of Berlin. Multiple roles in business development and operations of energy and utility assets including nuclear, solar and wind power generation. 5+ years in sustainability reporting operations for large scale Energy and Utilities companies.



THE ASK:

Raising €2m

Expanding into the **american** and **asian markets** within 24 months



URBAN DESIGN FOR CLIMATE CHANGE MITIGATION VIA ENVIRONMENTAL AND AIR QUALITY MONITORING

HOPU creates Human Oriented Products (HOPU). The Company generates urban innovations through the latest technologies such as AI, IoT and Data-Quality by engaging citizens and decision-makers, to guarantee that data is understandable by everybody, intuitive and usable. HopU's solutions support urban development decisions, and digital transformation via data-powered tools with dashboards, decision support tools and a genuine IoT device, called Smart Spot.

Smart Spot measures the NO₂, CO, SO₂, NO and O₃ at specific locations in real-time. HOPU uses ML to improve the precision of the measurements. Deployed sensors are calibrated and validated in a laboratory with high accuracy and certified reference weather stations so that city authorities can implement effective policy actions.

New applications include crowd monitoring to enforce social distancing, saving a City from having to enforcing the lock-down measures that are deadly to economic activity and social well-being.

TEAM



Antonio Jara Co-Founder & CEO

Antonio has a computer engineering, M.S. degree in advanced Information and Telematics Technologies, a master in business administration and a PhD in computer Science. His work experience started in 2007 when he worked as researcher in the University of Murcia, in United Technologies Research Center (UTRC) in Ireland and in the IEEE as a co-chair. He setted up HOP Ubiqutous in 2013.



David Fernandez Co-Founder and CTO

David has a degree in Computer Sciences Engineering and a master of Engineering in Ubiquitous Computing both of them in the University of Murcia. His work experience started in the University of Murcia when he took part in the research team by 2011. He also worked as software engineer at viBrain Solution



THE ASK:

Raising **€1m**

Open to **customers** such as pilots, flight schools, military, risk-engaged professionals

Open to **partners** from **aviation institutions** to **ai firms** and **physio sensors**

SAVING LIVES IN GENERAL AVIATION

SAFETYIN develops Human Factor-centered solutions to assist and preserve the lives of aviation pilots and individuals engaged into risk-intense environments. A comprehensive set of solutions is designed around the SAFETYIN'Box: a portable and multifunctional device capturing and analysing data for realtime inflight assistance and post-flight auto-debrief connected to Scenario-Based Training (SBT) on personal simulators.

At the intersection of human factors, common sense and technologies, SAFETYIN aims to drastically reduce fatality rates in General Aviation and other risk-intense environments. The company is relentlessly focusing on designing personalised Life Preservation Systems designed to:

- Safeguard Pilots against being irremediably drawn into the spiral of fatal accidents
- Constantly assist Pilots in refining their Safety Situational Awareness & Acumen

TEAM



Arnaud Violland Founder & CEO

20 years in Strategy & Management Consulting in Technology and Aerospace companies. General Management, Strategy, Blue Ocean and New Product Design.



Frederic Neuzeret COO

20 year in General Management, coaching the technical team and responsible for the quality management system.





THE ASK:

Raising €9m

REAL-TIME ECONOMIC INTELLIGENCE. WORLDWIDE

GIVING YOU AN ASYMMETRIC INFO EDGE OVER WALL STREET

QuantCube Technology, founded in 2013, offers unique real-time macro data tracking - Consumption, Industrial Production, Employment, Credit Cycle and International Trade - by leveraging the asymmetry of information. A proprietary algorithm brings data from multiple conventional and non-conventional data sources including earth observation, radar and atmospheric satellite data, maritime & air traffic data, employment data, financial loans, and others.

The QuantCube Economic Intelligence Platform delivers key Macro variables in real-time to the Financial Industry, eliminating the need to rely on official figures that are published with a several months lag. These time-series are used daily as inputs for investment decisions in equity, fixed income and commodity markets. Customers are asset managers, investment banks and international organisations.

QuantCube has already raised 5M\$ in 2018 from Moody's and the investment arm of CDC International, as well as from key public sector agencies including the European Space Agency (ESA) and the French Space Agency (CNES).

TEAM



Thanh-Long Huynh Co-founder & CEO

Thanh-Long Huynh, CEO, has more than 20 years of experience in investments and macroeconomics for leading investment banks and hedge funds, creating in 1998 the quantitative division at Société Générale in New York before co-founding a hedge fund in Chicago in 2000. Thanh-Long graduated with MS Financial Mathematics from University of Chicago as a Fulbright scholar. He is also CFA charterholder.



Ghizlaine Amrani Co-Founder & COO

Ghizlaine Amrani, COO, held operational positions in strategic planning and marketing within the luxury industry – Cartier and Bulgari - for the European and North American markets. During her first years, Ghizlaine has worked as psychotherapist for children with autism and childhood psychosis for the Red Cross. Ghizlaine graduated with MS from ISG business school and MS in psychology. She speaks 6 languages.



THE ASK:

Raising **£500k**

Open to partners from **mid market brands** in media, tourism, music, retail, app development to **corporates** for **large scale use cases**

ENGAGEMENT FOR BRANDS THROUGH LOCATION BASED MOBILE MARKETING

Bubbl is a quick and easy, development-free technology that plugs into any mobile app, supercharging it with new content distribution, customer engagement and loyalty tools. This enables location triggered mobile engagement including video, audio, notifications, surveys, deep links and footfall counts. Bubbl eliminates the friction in the mobile advertising industry, reducing fraud and enabling privacy compliance. The platform enables advertisers to increase retention and loyalty with new revenue streams, and location based impact data.

The team launched their core tech in Dec 2019, signing 2 clients and £36k in license revenue by June 2020. Bubbl aims to establish itself as a pioneering international mobile marketing platform that uses emerging space and network technology to enable the most precise location triggered rich and immersive media content.

TEAM



Jo Eckersley Founder & CEO

Jo was named one of 5 Rising stars by Computer Weekly in their 'Most Influential Women in Tech Awards 2019'. She is a seasoned entrepreneur and exceptionally well established in the marketing and PR industry. Jo ran an innovation agency for several years prior to establishing Bubbl, and was also a Monitoring Officer and Assessor for UK funding agency InnovateUK for 14yrs.



Mark Hunter Head of Tech Development

Mark has 27 years commercial experience in Information Technology. He remains hands-on and dedicated to ensuring quality within our processes and software. Mark has work across a wide range of industries including the BBC and Guardian News and Media Group, Toyota, Lexus and BMW, UK Government departments.

Quantum-South

THE ASK:

Raising €5m

USING QUANTUM COMPUTING FOR OPEX EFFICIENCY THROUGH CARGO LOAD OPTIMISATION.

Determining the optimal loading strategy for goods in different vehicles, such as boats, aircrafts, trains or trucks is complex. Intrinsic factors such as perishability, the value of the goods as well as extrinsic factors such as when and where a container is due to be unloaded, all have an impact on cargo configurations.

Freight management is complicated and cargo optimisation is at the core of the profitability of the whole supply chain. Optimising loading currently involves calculations that do not take account of many of the variables that would truly impact profitability and reputation within the logistics industry. A 1% increase in Cargo Load Factor unlocks a 1.6% gain in revenue.

Our beachhead market is cargo in airlines and vessels leveraging quantum computing software, by identifying the optimal selection of individual packages to be transported by maximizing the weight transported in each trip, subject to the load and volume constraints of the aircraft.

TEAM



Martin Machin Co-Founder

Martin Machin, Co-Founder, entrepreneur and internationally experienced executive, Master in Business Administration and Computer Science Engineer. He led Tata Consultancy Services in Uruguay, serving global markets and many Fortune 100 companies with a team of 900 people. He was managing partner in Pyxis, an IT professional services company with operations in Latam and United States. Entrepreneur and investor in emerging technology startups including blockchain, neurotechnology and ridesharing.



Rafael Sotelo Co-Founder

Rafael SOTELO, Co-Founder, has held relevant positions in academia, industry and government. He is an Electrical Engineering and holds a PhD from University of Vigo (Spain), an MBA from University of Montevideo. He is the Director of ICT Department and Senior Researcher at University of Montevideo. Active volunteer and Senior Member at IEEE. He has had international leadership positions including Member-at-Large of AdCom of IEEE BTS, and Chair of IEEE South Cone Council.

**MORPHEE +**

Nous veillons sur vous

THE ASK:

Raising €2m

Open to **partners** from **nursing home, hospitals to insurance companies****MORPHEE+ :
REAL-TIME FALL DETECTOR****A HELPING HAND FOR NURSING HOME STAFF. PRIVACY-COMPLIANT PEACE OF MIND FOR YOU.**

MORPHEE + is a micro radar which detects falls of vulnerable people in real time and sends an alert to the caregivers or staff and enables immediate remedial action to be taken.

In the US alone, between 50% and 75% of nursing facility residents fall each year. In a typical year, a nursing home with 100 residents reports about 100-200 falls. About 10%-20% of nursing home falls result in serious injuries. MORPHEE+ reduces the amount of time staff need to dedicate to checking on residents by 30%.

The mission at MORPHEE+ is to take better care of loved ones, ensuring their safety, while preserving their independence and privacy. Our solution is sensor and camera-free. Unlike video surveillance and electronic bracelets, it is non-intrusive and does not stigmatise the person through external signs that marks dependence.

This technology has been developed through a collaboration with the French Center for Aerospace Research, ONERA and CERIG, with the support of SATT.

TEAM**Bruno Duperrier** Co-Founder & CEO

CEO of Morphee+ and ex General Director of CERIG, creating innovative solutions for ESMS (EHPAD, FAM, MAS, IME, ITEP) and local authorities for more than 25 years. He has an MBA as a company manager and a certification as an SMSI expert evaluator.

**Sylvain Azarian** Co-Founder & CTO

Researcher in the Department of Electromagnetism and Radar at ONERA, the French Aerospace Lab and director of SONDRALaboratories in Centrale Supélec, a french engineering school. He contributed to the development of the first prototypes of Morphee+ (electronic design and algorithms) during the technology transfer phase. In late 2018 he decided to resign from ONERA and join the startup. He is now CTO and has an active role in the design of the different products.



THE ASK:

Raising €5m

GENERATING SMART INVESTMENT PORTFOLIOS & ANTICIPATING THE RISK OF ANOMALIES DATA

AlphaBlock has developed an AI engine to generate smart investment portfolios and intelligence solutions. Deployed and validated first in the financial domain, the framework is industry agnostic and works on information structure (probabilistic behaviour of a component in its group) and not on information content (e.g. fundamental factors for stocks).

The investment management space has witnessed fee compression, needs economies of scale, and brand recognition. Despite these odds, our 5 years old Nasdaq listing RMIVG20 shined, beating its peers including the IBM Watson powered AIEQ and reaching absolute returns above 100% (more than 50% above its benchmark). AlphaBlock Technologies Inc. was incorporated in 2018 in Toronto and we brought in Real Ventures, a top Canadian new tech VC to validate our cross domain AI capability (Health, Weather, Cybersecurity, Advertising etc).

AlphaBlock's RMIVG20 uses Nasdaq's validation to prove that bots can generate consistent and systematic returns. Pension funds are not generating enough returns to take care of the ageing population because 90% of global asset managers don't beat the market, net of costs but still continue to charge high fees. There are few systematic, scientific and replicable processes which can reduce cost, assume market risk and generate returns (alpha) and can transcend beyond financial markets into non-financial domains.

In parallel we also established business presence in four regions India, U.S., Canada and Europe.

TEAM



Mukul Pal Founder and CEO

Mukul has spent over 20 years working to create a solution capable of disrupting the financial market. He is from the MIT FinTech Class ('16), holds an MBA in Finance, a Masters in Applied Econometrics and Statistics and holds the CMT designation. Mukul started his career as a lecturer of Finance and Economics at Institute for Management Development, India ('99) and continued to work in the derivatives domain working for top Institutions like Bombay Stock Exchange before starting his quant shop in 2005. Mukul is a ranked author on the Social Science Research Network and has filed several patents on data innovation.



Andrei Nagy Head of Sales Representative

He is the Head of European Sales at AlphaBlock and he engages with collaborative multidisciplinary innovation teams across various businesses and domains to socialize, prototype and deploy new intelligent distributed assets and services using AlphaBlock's General AI blockchain validated solutions. Andrei had strategic roles in private, corporate and government enterprises to enable platforms and services for payments, banking, telecom, smarter cities and central government, driving a culture of innovation, developing and delivering disruptive technology. He was building and supporting teams that developed, rapidly incubated, and managed to scale digital platforms that delivered value in areas like Digital Transformation, process automation, Cognitive Computing (AI, ML), Blockchain, IoT and advanced data analytics.



THE ASK:

Raising **£1.2m**

Open to **commercial partners** from **real estate** to **financial services**



UNLOCKING THE HIDDEN POTENTIAL IN THE PROPERTY ECOSYSTEM

A lack of understanding of the rules and processes of planning can make extending each home a painful experience. Lanu's technology can assess all the options available with minimal effort making the next steps of extending a home not just quicker and cheaper but also less risky.

We are building on our successful trial with a large high street retailer, Lanu empowers the homeowner in the process of understanding the potential for extending their homes, within the existing planning regulations, allowing them to dream and design and engage with suppliers from mortgage and loan providers to home building companies,

Lanu is the first technology platform that brings together all the players in the home extension market in a way that is friction-free, transparent and scalable.

TEAM



Shane O' Donnell Founder & Managing Director

Shane is a RTPI Town Planner who worked in local government in the UK for over 7 years in a variety of different local councils gaining key insights into the pain points on all sides for extending a home or property.

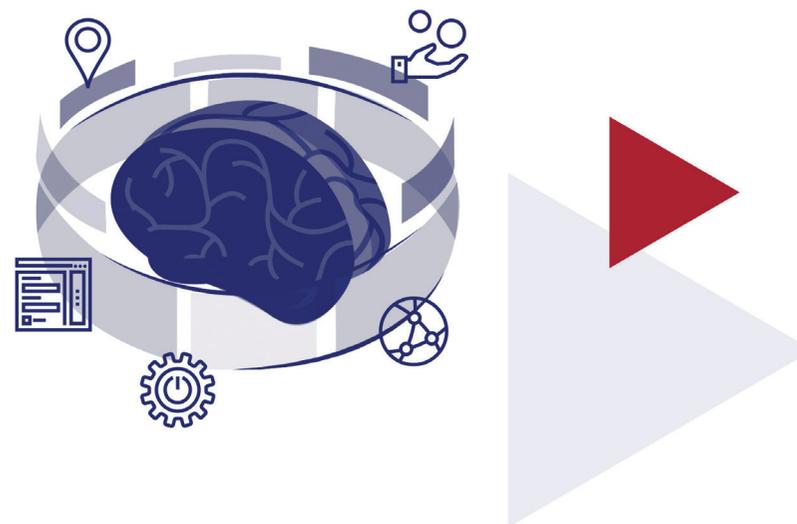
Shane heads a team of four, who have known each other for over 20 years originally attending the same school together. The diversity of our professional skills and experience post our school years, brings a wide range of expertise to bear on this venture such as: Town Planning, Coding, Mathematical Modelling, Graphic Design, UX, PR, Project Management.



THE ASK:

Raising **€250k**

Open to partners from maritime and industrial sector to logistics companies



MISSION-CRITICAL WIRELESS INTELLIGENCE FOR PEOPLE AND ASSETS. IF YOU CARE, WE CARE

Action Tracker, founded in 2015, is an innovation leader on Internet of Things (IoT) and telecommunications systems. Our solution connects workers, vehicles, assets and infrastructure, to solve problems of safety, security and provide real-time performance monitoring that enable immediate action and cost optimisation.

Action Tracker's electronic brains draw data from the source, and transfer it to the cloud using the appropriate comms in real-time, 24/7, everywhere. Using Artificial intelligence, machine learning and big data, the platform can take decisions and act locally and globally, solving problems of Safety, security and improving decision-making process.

Action Tracker has early signals of product market fit through initial sales of 100+ devices to clients from the civil protection, automotive (Dakar and Rallies) and leisure boat sectors. The company has obtained over 500K€ of funding from public sources and is now ready for pre-seed investment to fuel next stage growth.

TEAM



Eloy Martinez Co-Founder & CEO

Eloy is a seasoned Senior Account Manager/Sales Manager and General Manager, with a number of significant achievements in high-profile multinational firms, including Dell and Cap Gemini, spanning an 18 year career in information technologies.



David Ballester Co-Founder & CTO

Software engineer with more than 20 years of experience, working as CIO for pharmaceutical and IT companies.



THE ASK:

Raising **€500k**

Open to **customers** such as **infrastructure asset owners** (roads, rail, dams, levees, pipelines).



AUDITING THE SAFETY OF PUBLIC AND PRIVATE CRITICAL INFRASTRUCTURE GLOBALLY IN REAL-TIME

Geofem's proprietary technology brings together years of experience in civil engineering and the latest Earth Observation technologies to develop a radically new approach to the civil engineering sector. Our mission is to keep infrastructure safe for society by monitoring its state more effectively and economically through satellite image analysis that measures ground and structural movements.

Using the latest linear and non-linear data analysis techniques, infrastructure stakeholders access higher quality asset condition information at lower cost than conventional methods, allowing proactive and cost-effective infrastructure maintenance for public and private transport infrastructure managers, environmental custodians, water resource and utility managers, and mining, petrochemical and other commercial companies with a responsibility over critical infrastructure, where ever it is in the world.

TEAM



Andrew Lees Co-Founder & Director

Andrew is the Director of GEOFEM. He has extensive knowledge and over 20 years of experience in geotechnical engineering. He specialises in the practical application of numerical analysis tools in geotechnical engineering and has published several papers, textbooks and e-learning courses in this field.



Skevi Perdikou Co-Founder

Skevi has 20 years of experience in the fields of geotechnical engineering and satellite remote sensing, specialising in the use of finite element analysis for ground movement prediction and satellite radar techniques for ground movement measurement and monitoring. She gained an MSc in Geotechnical Engineering at City University, London and a PhD in the field of satellite remote sensing at the University of Southampton, UK.

ORBITALEOS

Earth Observation Solutions

THE ASK:

Open to partners that want to **test**, **recommend** or **endorse** their product

SOLVING PROBLEMS ON EARTH THROUGH SPACE OBSERVATION

Orbital EOS detects and characterises marine oil pollution from Space.

After having worked 12 years in aerial remote sensing of oil pollution for the Spanish Coast Guard, Orbital EOS decided to embrace new technologies and fly higher. Thanks to their domain expertise, they could promote a problem-based approach, trying to solve challenges in the field for industry and authorities.

EOS Viewer is the first digital platform providing marine oil pollution intelligence at global scale. Orbital EOS work with companies and organisations that want to guarantee secure and environmentally friendly operations at Sea. These entities might include Total, Shell or EMSA.

The company can reduce the cost of monitoring by a factor of 10 while increasing the surveillance capacity by a factor of 100. The product is a SaaS provided by subscription that is used to detect and characterise oil leaks and spills and forecast any oil spill transport and transformation.

EOS Viewer has been awarded by the European Space Agency among 100 European applications in ESA startup competition 2020

TEAM



Juan Peña Co-Founder & CEO

Juan Peña, CEO, has 10 years of exclusive experience as tactical coordination officer/airborne sensor operator onboard a maritime surveillance aircraft for the Spanish Maritime Safety & Rescue Agency. He is PhD candidate and holds a MSc in Remote Sensing & Data Analytics and a BSc in Oceanography.



Pablo Benjumbeda Co-Founder & COO

Pablo Benjumbeda, COO, has 12 years of exclusive experience as tactical coordination officer/airborne sensor operator onboard a maritime surveillance aircraft for the Spanish Maritime Safety & Rescue Agency. He holds a MSc in Remote Sensing & Data Analytics and a BSc in Industrial Engineering. Professional experience at Airbus.

SPACE END PARTNERS



BluSpecs

Over the last 5 years, BluSpecs has been at the centre of a global technology ecosystem, bringing together startups, SMEs, researchers, policy makers and corporates. Most importantly, BluSpecs is the sister company to IoT Tribe, a global accelerator with presence in London and Singapore supporting startups and corporates to do business together.



Cluj IT

Cluj IT is an innovative cluster association, a bottom-up initiative founded in October 2012, with over 80 members. It provides a platform where cooperation and innovation are drivers of a planned change that takes IT companies from a business model based mainly on outsourcing to proprietary products.



CEOSpace Tech

CEOSpace Tech is a research centre within Universitatea Politehnica Bucharest, an academic entity that leads advanced research programs in remote sensing and information processing technology and related fields, supports training programs and advises individuals and institutions concerned.



SAFE

SAFE is a large cluster composed of various representatives of space industry, mainly focusing on aerospace & security ecosystems. It brings together researchers, laboratories, start-ups, scale-ups, SMEs and large corporations, connecting them to each other and to the latest know-how of each domain



UPCT

UPCT is a research driven university with experience in designing and executing a successful IoT focused acceleration program, which has been recognized as the best acceleration program in Spain



Expanding the impact and adoption of Space Tech

Space Endeavour brings together Space start-ups, SMEs, entrepreneurs and the IoT ecosystem to increase the commercial relevance of the technologies across industrial sectors and accelerate their access to market at scale.

We scout for promising space technologies that can be brought to market from across Europe. Their market relevance will be explored by stakeholders through the initial design studios.

The ventures with the greatest potential are then supported through an intensive acceleration program that will build the founders capacity and further enable them to build and implement their go to market strategies.

Our collaborative ecosystem offers adapted tools and the support of real experts, from across R&D agencies, the investment landscape and corporates, that can help the founders succeed.

**JOIN THE GLOBAL
COMMUNITY TODAY!**

For more details visit space.iottribe.org
or find us on social media





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