Indoor Positioning System

Virtual Simulators

Digital Assistants

Digitalization

Power Electronics

Avionics

Custom Electronics

High Technology with a Positive Impact

skylife

Innovative, disruptive and sustainable technological solutions to improve people's lives.



What is **Skylife**?

At the forefront of engineering and technology. From Andalusia, to the world,

Skylife is a technology-based company born at the University of Seville in 2011 with the purpose of creating a different business model based on knowledge, values and people.

The constant efforts in R&D and industry relationships have led Skylife, year after year, to a growth in the number of success stories in key sectors such as Aerospace and Naval, allowing us to continue innovating at the forefront in other areas of the industry.



More than 100 R&D



projects developed

75% increase in billing for three consecutive years



A team of more than 70 qualified professionals



A company with international vision, but 100% Spanish capital

Key sectors we work on

We focus on markets with high level of demands.













INDOOR POSITIONING SYSTEM

Skylife Sileme

New patented indoor positioning technology to solve the problems that current systems have due to the presence of obstacles, especially in metallic environments. **INDOOR GUIDANCE**

Skylife Sileme SIG

High precision solution for indoor guidance of people based on mobile devices.



App for smartphones, compatible with Android and iOS, designed for people visually impaired

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Guidance by **voice instructions**, **vibration and on-screen prompts**. Braille line support



Applicable to all types of buildings: hospitals, public buildings, museums, libraries, shopping centers...



Easy installation and commissioning. Complementary to other existing systems. Integrable with other solutions



Helps the users **to find their destination in real time**, regardless of the point of origin. Facilitates the location of points of interest



Adaptation to all types of applications and flexibility in modifications of both spaces and routes

ASSET MANAGEMENT

Skylife Sileme SAM

Indoor positioning system for physical assets location in large spaces, regardless of obstacles and metal objects.



Maximum reliability and precision, the object to be managed never disappears and is positioned with a small margin of error

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Optimal solution for all types of buildings: hangars, industrial warehouses, logistics centers, sports halls...

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Positioning a large number of objects with a very reduced deployment of beacons and electrical installation



Non Line of Sight system. Works 100% without the need for a direct line of sight between the beacon and the object



High security in communications. No interference with other existing technologies



Temporary or permanent coverage for large spaces where other positioning technologies do not work

Works in complex environments and

situations: presence of metal racks,

frequent passage of vehicles...



Applicable in **buildings where installations cannot be placed due to lack of fastening** places or changing interior structures

SUCCESS STORIES



SILEME SIG | MACARENA HOSPITAL

Demonstrator installed for guiding people with reduced visibility through the facilities of the Virgen Macarena Hospital in Seville (Spain).



UNLIMITED SUPPORT TOOLS

Skylife Infinity

Unlimited assistance, training and simulation platform. Virtual simulators and digital assistants based on extended reality (VR, AR and MR) achieving real immersive experiences with the aim of revolutionizing the way in which we train, guide ourselves in complex processes or provide remote support.



Skylife Infinity Trainer

Training and virtual simulators to train or learn new processes with virtual reality.





Immersive experience with full-scale 3d models



Shortening the learning curve and increased retention of information

Safe environment for

hazardous activities

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Continuous assessment and measurable results for certifications

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Customizable and 100% adaptable to all types of needs



Capability to integrate real systems and 3D models generated in the main systems of the market

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Multi-purpose and multi-platform solution, saving time and investment



Extreme optimization service of 3D models to improve the performances of the final solution

SUCCESS STORIES



VIRTUAL TRAINER

External consulting in the development of a virtual simulator for the training of mechanics, pilots and creation of operating manuals.



OPERATING SIMULATOR

Virtual simulation platform for industrial and defense environments to train operators in complex activities in a safe environment.

Skylife Infinity Guide

Step-by-step virtual guidance for complex operations or maintenance tasks with augmented reality.



A step-by-step interactive learning model for complex or new processes

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Use in **assembly, maintenance and repair** operations

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Less qualification required and error rate reduction



Capability to include **artificial intelligence and automation** (decision making, computer vision, chat...)



Multi-format resources, including text, images or videos



Use of animated and detachable 3D models for better understanding



Shortening the learning curve and increasing the retention of information



Integrable with real time data through IoT and different communication protocols

SUCCESS STORIES



DATA LOADING WORKSHOP

Digital Assistant for optimization of test protocols and equipment configuration control, synchronized with online services.



eTESTING

HMI assistant for the integration and synchronization of work orders, test bench management, software loading, attestation, verification, traceability and automations.

REMOTE SUPPORT

Skylife Infinity Mentor

Connection between the operator and the expert in real time for remote assistance or training with mixed reality.



Remote and live assistance, visually connecting the expert with the operator's environment in real time



Mixed reality environment, overlaying real elements with 3D models, indications, videos and live annotations



Integrable with real time data through IoT and different communication protocols



Possibility of integration with any platform via API



History and artificial intelligence to reduce the number of assistances

Reduction of the need to travel,

remotely in real time

connecting the expert and operator

Live annotations, with a system of graphic

and text indications that the expert can

show on top of what the operator sees



Securing of communications

SUCCESS STORIES



TELEASISTENCIA

Remote technical support tool that allows guidance in technically complex operations without the need for experts to travel.



ADOMIF

Digital assistant developed for the photovoltaic sector with the aim of digitalizing and transforming operation and maintenance processes.

DIGITALIZATION

Development of customized digital solutions and specific products for industry 4.0, accelerating learning curves, shortening distances or providing support in complex processes.

Custom solutions following the needs and requirements of the project and integrating all available technologies

Participation in innovation and **R&D projects** contributing with our knowledge and experience

Hardware in the loop

Integration of real physical components in simulations for testing, validation and training.

Digital twins

Virtual representation of a complete system to simulate, analyze and monitor its behaviour.

Artificial intelligence

Solutions to support decision-making and improve proces's efficiency.

IoT (Internet of Things)

Design of solutions and integration of systems with sensors, electronic devices, communications, detectors...

SUCCESS STORIES



INDAGA SOLAR

Digital transformation of operation and maintenance processes in large photovoltaic power plants. Including IoT and Artificial Intelligence.



HARVIS

Creation of a platform based on artificial intelligence to support the decision of pilots in complex situations.

POWER ELECTRONICS

Design, development and manufacture of power converters for specific requirements: high energy efficiency, reliability in extreme conditions, compact design or short deadlines.



Custom solutions following the needs and requirements of the project and applying our acquired knowledge

Participation in innovation and **R&D projects** contributing our knowledge and experience



Wide experience and specialization in the aeronautical sector, transferring its demanding standards to all types of markets



Adaptation to the most demanding requirements: high energy efficiency, reliability in extreme conditions, compact design...



Specialized in projects which seek sustainability and innovation with application to the environment and people's lives



Interdisciplinary team of **engineers** specialized in power electronics

SUCCESS STORIES



Isolated AC/DC converter (HVTRU) in accordance with the aeronautical regulations DO-160, MIL-std-704 and DO-254, to comply with a DAL C.



HYPNOTIC

On-board hybrid energy management system aimed to achieve "zero-emission" aircraft. Development of a DC/DC converter with modular architecture.



ZEUS

Design and development of the power electronics of an ultra-fast charging station prototype for electric vehicles, together with Wallbox.



TOKAMAK SMART

Power supply system, electromagnetic field coils and microwave system as part of a plasma particle fusion reactor prototype.

AVIONICS

CUSTOM ELECTRONICS

Design, development and manufacture of integrated and differentiating customized electronic solutions for sectors such as aerospace, naval or positioning.

Custom solutions following the needs and requirements of the project and applying our acquired knowledge

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Participation in innovation and R&D projects contributing with our knowledge and experience

Avionics

Custom solutions within the field of electronics applied to aeronautics.

Custom Electronics

Development of custom electronic solutions, regardless of the area of application.

Electromechanical actuator control

Specialization in the development of Electronic Control Units and Electromechanical Actuators in the field of aeronautics aimed at more sustainable aircraft.



More than 10 years of experience in avionics and custom projects



We apply our **specialization in the aeronautical sector to develop the most disruptive technology** in other areas



Specialized in projects that promote technologies applicable to people's lifes, electric mobility, sustainable aviation and future energies



Interdisciplinary team of **engineers** specialized in electronics

Skylife MMIBS

Mini-Multi Interface Box Simulator

Portable reprogrammable multiprotocol device for avionics testing and industrial environments.



Programmable. Emulates any electronic system on board, **simulating inputs and outputs following the logic and the corresponding protocol**



Remote execution and **analysis of** complex tests and simulations.



Integration of **several test and simulation systems** into a single, very small and portable system



Integrates multitude of protocols, including ARINC-429, MIL-1553, AFDX, CAN, RS-422, and analog and digital I/O

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Reduces time and cost, accelerating the implementation of tests and simulations

SUCCESS STORIES



EMA4FLIGHT

Design of electromechanical actuators, as well as their Electronic Control Units (ECUs), based on analog electronics, to activate the flap surfaces, in accordance with the DO-160 standard.



OPTIMISE

Project, under the PADR program, to improve positioning, navigation and time in areas without access to Global Navigation Satellite Systems.



UTM CoCo

IoT solution for the coordination of drone traffic in 4G/5G networks for Unmanned Aircraft System Traffic Management (UTM)



AMuLET

Control unit for electromechanical actuators intended for the controlled deformation of a morphing wing trailing edge.



skylife

Why trusting in **Skylife**?

What sets us apart are our goals and way of working

Our vision is to lead the technological revolution that promotes a positive social impact to move towards a more equal and sustainable world.

We generate creative, useful and cutting-edge solutions, trusting in the capacity of our professionals and putting innovation at the service of people.



We listen and analyze the problems to design the solution that best suits the needs and requirements



We develop the customized project or adapt our solutions to cover all areas of the project

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We guarantee the customer experience, the quality of the processes and the fulfillment of the objectives



We are committed to innovation and sustainability, seeking the positive impact of technology





Our **experience** supports us

We work with major players in the aeronautical, space and defense sectors, as well as other major companies in the field of innovation.



From Andalusia to the world

Our company is located in the **Parque Científico y Tecnológico de la Cartuja**, an exceptional environment for technological development, where the main companies and scientific, technological and training entities are located.







"If you want to go far, do complicated things."

Maria Ángeles Martín Prats Skylife Engineering CEO

Parque Científico y Tecnológico de La Cartuja

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