

## Vacancy Profile (max. 2 pages length)

### EMILY – Smart Respiratory Medcare

#### About Us

*Brief presentation of your company/Tecnio Centre, specifying your sector of activity, research infrastructure, research expertise in the field and in technology transfer activities and the conditions you offer (maximum 2,000 characters).*

AETHER TECH is Health Tech start-up focused on respiratory diseases. EMILY, the first product launched is an AI powered platform to support and assist hypoxemic patients in inside and outside hospital walls. We want to change the way hypoxemic patients are treated by creating a medical-based ecosystem that will not only monitor every hypoxemic patient 24/7, nor in a dynamic and predictive way will adjust in real-time the oxygen taking into consideration many different factors, such as physical activity or environmental conditions, anomalies or patient history.

EMILY will start by developing a CLINICAL USE platform (security management system that unify O2 flow control gathering all patients under one dashboard acting real-time and connecting with all available clinicians). The following leap will be a HOME USE platform where no medical supervision is available, with an enriched software ecosystem (Mobile APP / Medical Dashboard / Internal Dashboard / Enriched AI & ML / Dynamic Valve and other devices compatible).

AETHER TECH is founded by a top-notch Medical, Business and Tech Team, and has alliances with some of the main Hospitals in Spain and Medical devices companies.

#### Researcher's profile

*Description of the researcher requirements. Do not include the Tecniospring eligibility criteria in this section, but rather describe the minimum education required, the preferred areas of expertise, the experience, the minimum language requirements, etc. (maximum 1,000 characters).*

Software Engineer with Master's degree or PhD in Computer Science, Software Engineering or a related technical discipline.

5+ years of professional experience as a Software Engineer Developer or Control Systems/Embedded Engineer  
Demonstrated proficiency in at least one modern programming language, such as Java, Javascript, C/C++,C#, Python or GoLang.

Knowledge of at least one language for real-time control systems such as microcontroller, PLC or Industrial PC.  
Experience with building software solutions that leverage AWS services (e.g. S3, DynamoDB, EC2, ECS, SNS, SQS etc.)

Experience and/or a strong interest in web/mobile technologies (e.g., JavaScript/TypeScript, NodeJS, React, WebPack, HTTP mechanics/performance).

Strong Computer Science and development fundamentals, including object-oriented design, data structures, algorithm design, and complexity analysis.

Experience serving as technical lead throughout the full software development lifecycle, end-to-end, from scoping, planning, conception, design, implementation, and testing to documentation, delivery and maintenance.

Creates reliable/maintainable code and finds creative and scalable solutions to difficult problems.

Knowledge of professional software engineering and best practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations

English language fluency (written & verbal).

*Brief description of the project objectives and expected results. Remember to define the tasks that will be developed by the researcher (maximum 2,000 characters).*

AETHER TECH is looking for a Senior Software Development Engineer (SDE) who is excited about the opportunity to be a technical leader for a team that is building the next generation of cloud-powered real-time monitoring systems.

The charter of the role is to create from scratch a SW ecosystem to manage and monitor chronic respiratory patients combined with a HW developed to regulate oxygen flow.

The ideal candidate is passionate about software development and has a track record of leading design and implementation of new products and features. He should care about the user experience and be confident providing leadership on both back and front-end initiatives. The ability to mentor and lead a team to build well-architected software within a positive team environment are key to the role.

He will lead the development of a real-time monitoring ecosystem and cloud data architecture:

#### CLINICAL USE

A medical dashboard for a real-time monitoring of patients connected to oxygen, with an alerts and security system and protocol.

#### HOME USE

A proactive mobile app, compatible with several respiratory devices that manages a wide range of functionalities and it's integrated with a medical dashboard for real-time monitoring.

Will be in charge of the team growth and external contract suppliers, and will have to be able to make efficient budgets, progressive team dimension and will be in charge of developing the tech memory of the project, supervising and updating it as well as the project move forward.

## Project Abstract:

Incoming  Outgoing+Return

## Sector:

Food Industries  Industrial Systems

Sustainable Mobility  Health and Life Sciences

Chemistry, Energy and Resources  Design Industries

Culture and Experience-based Industries

## Technology:

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Photonics

Biotech

ICT

Nanotechnology

Advanced Materials

Advanced Manufacturing

## Contact information

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