

## PHOEBE development team is expanding!

We are looking to hire highly motivated colleagues with expertise in at least one of the following:

- 1) DevOps
- 2) Back-end development
- 3) Front-end development

Part of our stack includes Linux, Docker, Python for back-end, Vue and React for front-end.

Previous experience in a professional environment is a plus. Salaries are within the range of €15,000-25,000 gross/year, depending on experience and overall CV.

Successful applicants will have the opportunity to receive training on state-of-the-art tools and participate in European and National-funded projects. Moreover, they will have the chance to utilize their expertise in machine learning and data science projects.

PHOEBE Research and Innovation Ltd<sup>1</sup> was founded in 2016 and its mission is to connect academic research with the industry, offering cloud-based solutions using state-of-the-art analytics. Together, we will design monitoring, control and optimization solutions for industrial systems and critical infrastructures, such as buildings, water distribution systems and electric power systems.

We look forward to receiving your CV, a copy of your degree transcripts and cover letter at [jobs@phoebeinnovations.com](mailto:jobs@phoebeinnovations.com).

Data Privacy Policy: All data received will be processed by PHOEBE Research and Innovation Ltd for hiring purposes exclusively. Your data will be retained for a period of 6 months. Deadline for applications: **open**

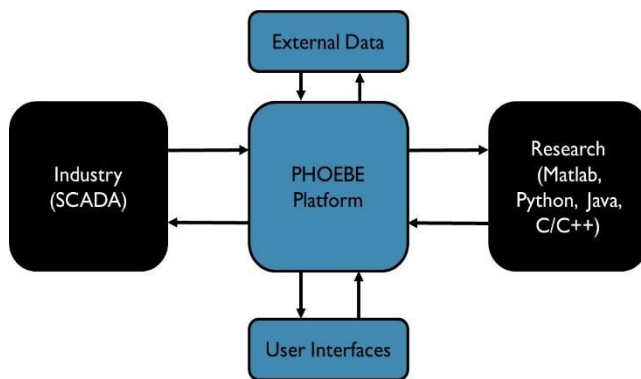
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<sup>1</sup> <https://www.linkedin.com/company/phoebeinnovations/>

## What we offer

An innovative, cloud-based infrastructure based on open standards, bridging the gap between research in monitoring and control, and industrial applications.

## Our solution



## The PHOEBE Platform

- Retrieves data from industrial systems through **secure communication channels**
- Stores data in **cloud-based distributed databases**
- Processes data using distributed computations and **big-data analytics**
- Integrates implementations of authenticated researchers by enabling communication **directly through Matlab®** using open **APIs/libraries**
- Executes algorithms on different machines/networks in a **modular architecture**
- Enables design of customized **web and mobile applications** through its API
- Exchanges messages using **open standards**

## Potential Applications

- Water Distribution Systems
- Electric Power Systems
- Smart Buildings and Smart Cities
- Transportation Networks
- Irrigation Systems
- Environmental Monitoring
- Healthcare Emergency Management
- Any application that involves time-series data, GIS, simulation models, research-based data analysis and others

## General areas of expertise

- Preparation of any type of Proposals
- Modelling, Simulation, Optimization, Monitoring and Control of building, water distribution, electric power systems, etc.
- Big-data/real-data analytics & Machine Learning
- Event detection for leakages, contaminations, faults, etc.
- Sensor Placement
- GIS and hydraulic modelling
- Security and impact-risk optimization

## Active Projects

- **Domognostics: Intelligent Building Automation Diagnostics**, H2020, ERC Proof-of-Concept, 755134
- **WaterAnalytics: Smart Analytics for Improving Efficiency of Water Distribution Networks**, Research in Enterprises, ENTERPRISES/0916/0023

## ➤ Domognostics

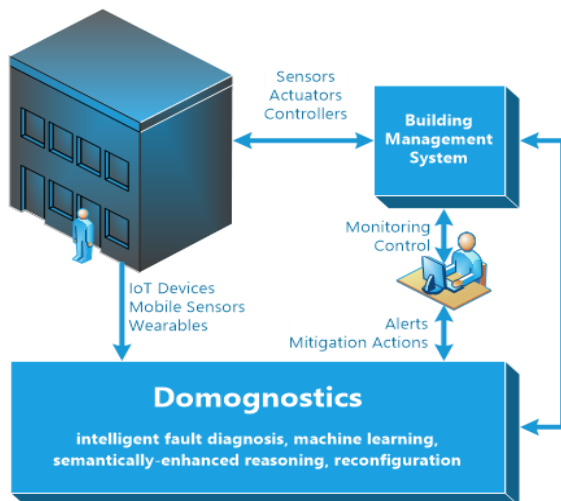
### The Challenge

- Buildings consume 40% of energy consumption and produce 36% of greenhouse gas emissions
- EU targets have not been achieved (gap of 10-30%)
- 5-20% of energy consumed in buildings for HVAC, lighting, water heating is wasted due to faults and inefficiencies

### The Solution

A novel platform for:

- Monitoring building automation systems
- Detecting and diagnosing any component faults and/or unexpected events
- Providing remedial reconfiguration actions for improving operational efficiency
- Interoperating with existing BMS to extend capabilities
- Integrating directly with heterogenous sensor types (IoT devices), mobile sensors, wearables, etc.
- Utilizing intelligent fault diagnosis algorithms with machine learning capabilities

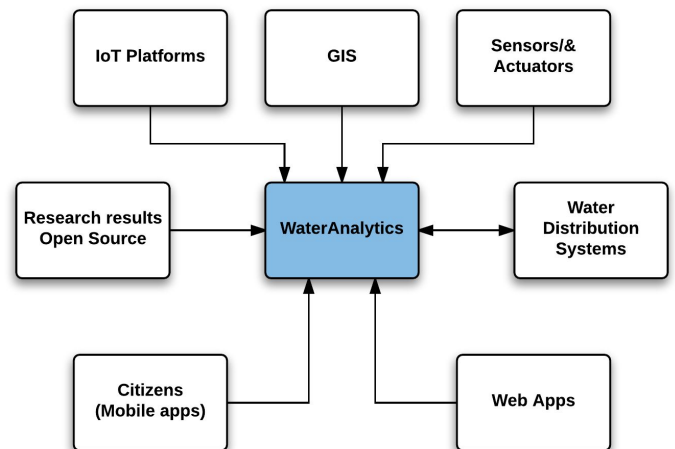


## ➤ WaterAnalytics

### The Challenge

- 10-40% of EU's available water wasted due to leakages, lack of water-saving technologies, etc.
- 1/5 litres entering a water distribution system does not produce any revenue (non-revenue water)
- 10 billion tons of water lost per year (20-30% due to leakages) → €10 billion of lost revenues for water utilities

### The Solution



A novel platform for:

- Integrating state-of-the-art intelligent monitoring methods and big-data analytics
- Helping water distribution system operators improve their system efficiency by 5-10%