LISIOS

Thesis (Bachelor/Master) Physics / Sensor Technology – Development and implementation of measuring model

We are a young startup located in Cologne. We are developing the Lisios WaterAlarm, a system to measure water consumption and detect leakages in residential buildings. The system consists of a device which can easily be attached to the mains water pipe by homeowners. In an app, users get detailed information about their water consumption and receive alerts in case a leakage is detected. With our system we want to protect homeowners from major damage, but also contribute to a more responsible use of the scarce resource water.

The aim of the thesis is the development of a physical model and the implementation of a simulation as a basis for the optimisation of our measurement and detection algorithms. The exact topic will be defined in consultation with you and your university.

Our and your challenges:
- Analyse and evaluate our existing sensor system
- Design of a physical model for the heat transport to the sensors during the flow of differently tempered substances
- Implement a simulation in Python or Matlab
- Assessment and evaluation of the simulation – limitations, exceptions, and extensions

What you bring to the table:
- You are studying Mathematics, Physics or alike
- Knowledge about physics and physical simulations
- Experience with Matlab or Pythons
- Reliability, motivation, and commitment

What you can expect from us:
- Challenging and exciting work atmosphere of a startup / small team
- Flexible working hours. Location of your choice. If you work in our office or remote from home is up to you
- Possibility of permanent employment later on

We have sparked your interest? Then get in touch with us via jobs@lisios.de. Send us your CV or simply some information about yourself and we schedule a videocall to get to know each other.