

Software Engineer: Computational Physics

About us

PlanOpSim is a start-up company focusing on optics and photonics. Our mission is to make nano-photonics design easy and accessible. PlanOpSim develops a numerical simulation software to model and design meta-surfaces.

Meta-surfaces (for example nano-structured lenses) are an upcoming field in the nano-photonics industry. The technology has been named as one of the top 10 emerging technologies by the World Economic Forum. PlanOpSim's software is at the heart of this technological breakthrough. It is used for the design of nano-structured photonic components in numerous domains like telecom, VR/AR devices, holography, medical, automotive and metrology. Our users are companies and research centres from Sydney to Silicon Valley.

PlanOpSim is a start-up located in Ghent, Belgium, in the heart of a thriving region for photonics technology.

Job description

As Software Engineer for computational physics, you will join PlanOpSim's software development team. Your primary role will be to develop the PlanOpSim software to be the world leading tool for meta-surface design and calculation. For that purpose, you will develop, implement, and validate physical and mathematical models for design of nano-structured optical components. You investigate, benchmark, and optimize the stability, speed and memory requirements of those methods and integrate them into the PlanOpSim software product.

Additionally, you will document and provide instructions, training and advice to the product owner and technical support team. If interested, you can also participate in commercial or publicly funded R&D projects using PlanOpSim's software or other commercial software such as ZEMAX ray-tracing.

Typical tasks will include:

- Researching and developing electromagnetic and optical simulation algorithms
- Implementing these algorithms in a robust and efficient software package
- Writing clear and structured documentation of your code

Your profile

The ideal candidate would have:

- A Master's degree in Computer Science, Photonics, Physics, Electrical Engineering, Mathematics or equivalent through experience
- Experience in software development for computational physics and or numerical optimization
- Experience in developing software in either python or C++.
- Fluent speaking and writing in English.
- A self-starting personality, who enjoys working in a rapidly changing environment.

The following are considered an extra advantage:

- Experience with automated testing packages in python (pytest, selenium, ...)
- Be familiar with modern development tools and methods such as git, Agile, CI/CD pipelines
- Experience with development of web applications

What we offer

You will receive a competitive salary and extra-legal benefits in line with your level of experience. An additional remuneration in company stock options is available if interested.

You will be joining a fast growing start-up and have a strong impact on the company's growth and future direction. Depending on your experience partial or complete remote work is possible.

By joining PlanOpSim you will be working at the cutting edge of technology with many opportunities for personal and professional growth. You will develop skills in the latest technologies in distributed computing, photonics and ML/AI. As a young technology company we foster an open and flexible work environment.

Contact:

Send your résumé and application letter to lieven.penninck@planopsim.com