Senior Software Engineer (Python)

VPIphotonics, a premier provider of professional simulation software for classical and quantum optical communication systems, integrated photonics, and fiber optics offers a position in its headquarters in Berlin, Germany. We seek a Senior Software Engineer with a focus on Python software development for our products and collaborative R&D projects:

Responsibilities

- Drive technical leadership and coordination in designing and developing an open cross-institutional software platform for a QKD (Quantum Key Distribution) post-processing stack. This activity includes the development of extensible Python libraries and desktop frontends, preparation of platform demonstrations, as well as testing, documentation, and maintenance.
- Contribution to the VPI software product development, including product prototyping, specification, implementation, testing, and documentation.

Required Skills & Experience

- M.Sc. degree in Computer Science or equivalent.
- Programming experience in Python of at least three years.
- Proven track record in developing complex desktop applications (from architecture to deployment) and leadership in collaborative development projects.
- Experience in using NumPy, SciPy, pandas, and the like.
- Knowledge of information theory, coding theory, and signal processing is desirable.
- Knowledge in one or several areas is a plus: differential equations, mathematical physics, probability and statistics, numerical methods, electromagnetic theory, photonics, fiber optics mathematical modeling.
- Experience in MATLAB is a plus.
- Fluency in English. Knowledge of German is a plus.

Further, we envision that the successful candidate will have

- Excellent communication and presentation skills
- Strong analytical and problem-solving abilities
- Teamwork and leadership skills
- Technical writing skills
- Self-discipline, motivation, and ability to conduct independent research and development

Join our team to work alongside an expert team of programmers, modelers and designers addressing the demand of tomorrow's research and industry needs. VPIphotonics will provide comprehensive product training, flexible work hours, and a rewarding international career path. We can consider only candidates with a valid German Work Permit.

Salary will be negotiated depending on a candidate's qualifications and experience. If you would like to be considered, please send your resume to jobs.devel.g@VPIphotonics.com.

About VPIphotonics

VPIphotonics sets the industry standard for end-to-end photonic design automation comprising design, analysis and optimization of components, systems and networks. We provide professional simulation software and professional consulting services. Our award-winning solutions are used extensively in research and development, and by product design and marketing teams at hundreds of corporations and over 160 academic institutions worldwide.

For more information, visit www.VPIphotonics.com