Photonic Engineer for photonic integrated circuits

Are you eager to significantly impact the future of laser sensing and telecommunication and be part of a dynamic start-up at the forefront of technological advancement? If yes, Deeplight GmbH might be an option for you. We are looking for a talented and highly skilled engineer to join our team and contribute to the cutting-edge field of advanced laser and frequency-comb sources, leveraging cutting-edge Photonic Integrated Circuits (PICs).

The company

Deeplight is a privately held high-tech spin-off company, founded in 2021 by researchers from the Swiss Federal Institute of Technology in Lausanne, Switzerland (EPFL) and from Karlsruhe Institute of Technology (KIT), Germany. We specialize in developing frequency-agile laser sources and optical frequency combs with ultra-low phase noise based on advanced photonic integrated circuits. Our technology base enables us to cater to scientific, industrial, and consumer markets with significant economic potential. By bridging the gap between scientific-grade laser systems and widely used semiconductor laser diodes, we bring low-noise, highly compact single- and multi-wavelength laser systems to various applications, such as autonomous driving, optical communication for space, quantum computing, quantum cryptography, fiber sensing, and more.

Job description

- Simulations, design and layout of integrated photonic devices using Python and GDS design tools
- Development of custom electronic and photonic subsystems
- Participation in the mechanical design of the prototypes
- Development of the system control software
- Participation in the photonic chip linear/non-linear testing and optimization
- Participation in ultra-low noise laser characterization
- Reporting and documentation of system development progress

Your Profile

You enjoy an environment where your contributions and tasks are largely self-directed, and continuous on-the-job independent learning will be essential. Working in a team of highly skilled physicists and engineers, your expertise will play a vital role in advancing

hybrid laser systems. For this position, candidates should possess the following qualities:

- MSc or PhD in electrical engineering or physics or photonic or optics
- Experience in one or more of the following areas is preferred: electronics/integrated electronics, III-V semiconductor lasers and optoelectronics, silicon photonics design, nonlinear photonics/Kerr frequency comb, RF engineering, optical/electrical packaging, photonics system design, SiPh devices testing
- Preferred: Familiarity with key software, including CAD, Python/MATLAB, SiPh design tools
- Data management skills (like GIT)
- Industrial experience preferred, but not required
- Excellent proficiency of English, fluency in German, and French is a plus.

We offer

- The opportunity to define and shape from ground a high-tech company in integrated photonics technology for LiDAR, sensing, industrial metrology, and space communication
- Training on the job on 'next generation photonic integrated circuits'
- An inspiring working environment, in Germany, Karlsruhe
- Activity rate: 80-100%
- Place of work: Karlsruhe
- Start date: As soon as possible

Application

Please submit your application by filling out the form at the following link: application form

! Only candidates with Swiss, EU, or EFTA citizenship will be considered.

! Recruitment agencies: Without a prior written and signed agreement, all candidate submissions will be considered direct applicants with no agency fees.

- We are a small team fully committed to addressing all business requirements. Consequently, the review and interview process may take some time. Thank you in advance for your patience and understanding.
- Rest assured that if your background and experience meet the requirements of the position, we will reach out to you. If not, please accept our apologies for not being

able to respond to all candidates. We greatly appreciate your interest in our company.

- Once the position has been filled, we will delete all applicants' data within the next six months, unless you request an earlier deletion.