



Senior Photonics IC Design Engineer

Sicoya is a technology leader in silicon photonics-based interconnect solutions with headquarter in Berlin, Germany. We offer cointegrated semiconductor chips for next generation data centers using our in-house PIC and EIC design capabilities and large-volume CMOS foundries as manufacturing partners. The team consists of highly professional design engineers and managers with many years of experience in bringing state-of-the-art products to the market.

As a **Photonics IC Design Engineer** at Sicoya, you will work in a highly international environment and dive into a unique challenge, as you are involved in the design and the development of the next generation of optical transceivers chips. The main task is to develop active and passive SiPh components and tailor them to the requirements of our target use cases. This includes performing building-block and device channel simulations for evaluation of system-level behavior and corner performance.

Start: asap

Employment: Full time

Experience: 4+ years of experience

Your tasks:

- Design and model the behavior of passive and active photonic components for single and multi-wavelength datacom applications, including silicon and silicon nitride waveguide-based building blocks
- Perform corner analyses on building block and device level to ensure spec compliance
- Enable model integration into system level simulations
- Align component implementation into integrated silicon photonics circuits and devices with layout and PDK team
- Define design methodologies and design environments

Required profile:

- PhD in physics, electro-engineering or equivalent
- Experience in simulation of active Silicon Photonics building blocks for RF applications
- Simulation experience with passive silicon and silicon nitride building blocks for routing and coupling, taking into account processing impacts on amplitude and dispersion
- In-depth understanding of FDTD methods, Eigenmode expansion, and Monte-Carlo simulations
- Extensive experience with a variety of PIC design tools
- Programming experience in an object-oriented language
- Proactive problem-solving skills
- Team player that thrives in a dynamic working environment
- Strong technical and verbal/written communication skills
- Professional working proficiency in English is mandatory and knowledge of German would be an asset

What we offer:

- High degree of personal responsibility within a flat company hierarchy
- Ambitious internationally expanding team
- Various future career opportunities for every career level
- An inspiring working environment with flexible working hours, lounge area, free drinks and fruits
- Fascinating opportunity in an international high-tech environment in Berlin



Are you interested in working with us? Then we may just be waiting to hear from you. Please send us your CV and a motivation letter by email to: jobs@sicoya.com

Sicoya is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to gender, race, color, ethnicity, national origin, religion or belief, sexual orientation, disability or age.