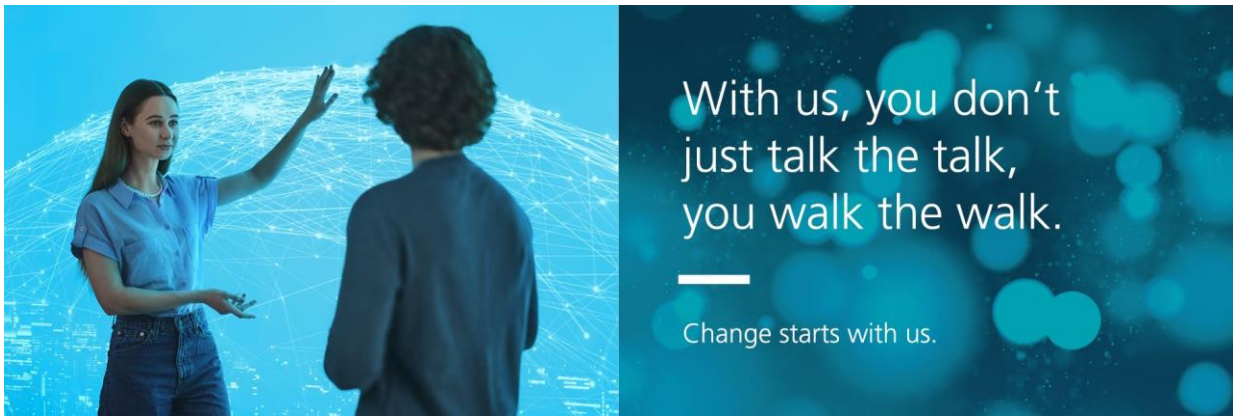
Fraunhofer IIS



Working Student – GreenICT and Optical Communication

The Fraunhofer-Gesellschaft (www.fraunhofer.com) currently operates 76 institutes and research institutions throughout Germany and is the world's leading applied research organization. Around 32 000 employees work with an annual research budget of 3.4 billion euros.

The **»Wireline Communication Circuits«** group at Fraunhofer IIS is part of the »Integrated Circuits and Systems« department and is located at the institute's Erlangen site. Our team members have diverse academic backgrounds in Electronics, Communication Engineering, and Physics. Our group, well known for multi-gigabit SERDES solutions for the automotive industry, looks forward to utilizing our expertise to address challenges in the field of sustainable and green integrated circuit technology.

The field of **»GreenICT and Green Electronics«** is an emerging research domain within our group. With our proven track record of working on digital Electro-Optic Transceivers (EOT), we are now working on making future technologies greener and more sustainable.

Are you interested in Green Electronics and Optical Communication and would like to develop your skills? Then have a look at our offer!

What you will do

- You will engage in research focused on Optical Communication, exploring the advanced technologies within this innovative field.
- You will conduct a comprehensive analysis of the current state of Optical Communication, evaluating the latest advancements in high-speed optical communications and identifying potential solutions for minimizing CO2 emissions.
- You will be responsible for examining the block-level architecture of the entire communication system and compiling a detailed report on your findings.
- You will conceptualize innovative testing methodologies for the complete Optical Communication system, leveraging your creativity and expertise to contribute to the development of environmentally sustainable communication solutions.

What you bring to the table

- **Educational Background:** Currently pursuing a degree in Electronics, Optics, or Physics, showcasing your passion for cutting-edge technology.
- **Knowledge in Communication Technologies:** A solid understanding of Optical Communication, demonstrating your interest in innovative communication solutions.
- **Strong Research Skills:** The ability to work independently while being open to exploring new concepts and methodologies.
- **Circuit Design Insight:** Familiarity with the basics of analog and optical circuit design is a plus, enhancing your ability to contribute to practical applications.
- **Language Proficiency:** Fluency in English, enabling effective communication in our dynamic and diverse team environment.

What you can expect

- **Flexible** working hours
- **Open** and **friendly team work**
- **Varied** tasks with room for **creativity**
- Exciting **seminars** and **events**
- **Networking** with scientists
- **Active contribution** in applied research

- **Interesting** and **innovative** projects
- **Mentoring program** »josephine®« for talented female students

Your start date and weekly working hours will be determined individually by you (as a student assistant from **10** to **15** hours a week or as an intern for a period of at least three months). You can reduce your hours before exams and increase them during semester breaks. You can flexibly determine the working days. After your studies, there may be an opportunity to work with us full or part time.

We would be happy to offer you the opportunity to write a bachelor's thesis or master's thesis in cooperation with us in the above-mentioned subject area. The thesis will be assigned and carried out in accordance with the rules of your university. For this reason, please discuss the thesis with a professor who can advise you over the course of the project.

We value and promote the diversity of our employees' skills and therefore welcome all applications - regardless of age, gender, nationality, ethnic and social origin, religion, ideology, disability, sexual orientation and identity.

Interested?
Apply online now (PDF: cover letter, CV, transcripts). We look forward to getting to know you!

Fraunhofer-Institute for Integrated Circuits IIS
www.iis.fraunhofer.de/en

Requisition Number: xxxxx Application Deadline: none Location: Erlangen