![Fraunhofer IIS]

Student Assistants / Intern / Thesis

Sidelink simulation (V2V) enhancements in OMNET++ frameworks

Fraunhofer IIS has a long-standing expertise in the design, definition and development of dedicated wireless communication and localization systems, particularly in the areas of mobile communication, automotive, broadcasting, satellite communication, industrial and logistics applications, as well as in IoT. Our team **»Broadband and Broadcast«** is working on the implementation of vehicle cellular communication in a simulation environment for the purpose of validating wireless technologies and optimizing resource allocation for remote driving vehicles. In particular in the areas of implementation of Car-2-Car use cases and platform testing we are looking for students with programming skills and experience to support us in these challenging tasks.

You are interested in the field of communication technologies and would like to apply your programming skills in wireless communication of 5G / 6G standards and to software optimization?

Then have a look at our offer!

What you will do
- You perform memory utilization profiling and identifying bottlenecks in current implementation
- You contribute to simulator performance enhancements by proposing/implementing optimized procedures and/or data-structures.

What you bring to the table
- You are currently studying computer science
- You have programming skills in C++
- You have a good understanding of memory optimization tools (f. ex. VALGRIND) and data structures
- You know what the 3GPP standard for C-V2X Communication is
- You pursue an independent, structured and conscientious way of working
- You are highly motivated to learn, work on complex tasks and you use creativity for solving problems
- You have very good English communication skills

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

Weekly working hours are determined by agreement. You can start from now on (as a student assistant from **10** to **20** 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, you have the option of working with us full or part time.

We would be happy to offer you the opportunity to write a bachelor's 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: 1464986   Application Deadline: none   Location: Erlangen