

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

YES.

We'll show you how at Fraunhofer.

Fraunhofer Institute for Integrated Circuits IIS offers an exciting job activity in our **Electronic Measurements and Signal Processing** department located in **Ilmenau**.

Student Assistant / Project Work for Test Environments for GSM-R / FRMCS Evaluation

Together with the research group of the same name at Technische Universität Ilmenau we work in the field of mobile communications and signal processing. Our main research focus lies on channel sounding and modelling up to 60 GHz, emulation of virtual EM environments and signal processing and algorithms, using compressed sensing and sparsity promoting reconstruction or high-resolution parameter estimation.

Currently, the Future Railway Mobile Communication System (FRMCS) is being standardized. In order to evaluate different approaches, we are setting up a lab environment consisting of GSM(-R) and 5G technologies to study GSM-R / FRMCS specific issues, based on software defined radios. We are looking for a student interested in this topic to help setting up the equipment and running tests. The topic can also be extended into a Bachelor's / Master's Thesis.

What we expect from you

- You study Electrical Engineering and Information Technology, Media Technology, Computer Science and Systems Engineering, Biomedical Engineering, Materials Science and Engineering, Technical Physics, Mechatronics or any adjacent field of study.
- Good knowledge and experience in Linux, and in networking programming (C) is a plus
- Good knowledge in mobile communications protocols (GSM, 4G, 5G) as well as VoIP
- Interest in software-defined radio technology

What you can expect from us

Fraunhofer IIS offers an exceedingly attractive working environment in a highly innovative key industry. You work in collaboration with a committed team that you can enrich with your ideas and which offers you considerable creative freedom. With your cooperation in versatile projects that are of high practical relevance, you actively participate in a forward-looking design process of engineering and technology of tomorrow.

Interested?

We look forward to your convincing and conclusive application (incl. motivational letter regarding your field of interests, your CV and current report of grades) at ems@tu-ilmenau.de.