

The Fraunhofer Institute for Integrated Circuits IIS is one of about 60 applied research-oriented institutes of the Fraunhofer-Gesellschaft with the aim of providing a technological basis for innovative products.

For our department Drahtlose Verteilsysteme, location **Ilmenau**, we are looking for...

Interns and Student Assistants (m/f)

For our research in the area of Virtual Electromagnetic Environments

Our newly built laboratory in Ilmenau, Thüringen, is dedicated to Over-The-Air testing of mobile and wireless user equipment (LTE, LTE+, GNSS receivers, Smart Sensors, Cognitive Radio). The department Drahtlose Verteilsysteme uses this laboratory to realistically emulate real world propagation scenarios under controlled conditions in so called Virtual Electro-magnetic Environments (VEE). These VEE are created by Wave Field Synthesis. For this, an array of synthesis antennas is driven in such a way that to the Equipment-under-Test the coherently superposed waves from these antennas are indistinguishable from real wave fields; therefrom the expression "Virtual EM Environments". The process itself is called wave field emulation.

We offer a number of interesting topics that deal with the optimisation of the emulated fields to which the Equipment under Test will be exposed, with possible new applications like cognitive radio or V2X communications, and with experiments with multi-band emulation.

You should have

- An engineering sense for microwave equipment and fields, previous experience is a plus
- Good knowledge of MATLAB

We offer

- Theoretical investigations in Wave Field Synthesis theory
- Applied work in any of the active application areas we are currently exploring

Moreover, we offer an open and cooperative working environment as well as freedom to develop your own interests, knowledge and skills.

Interested?

Do not hesitate: Join our team and work with us on the Technology of tomorrow!

Reference number: **768028**

Please inform us, how you found out about our job offer.

Fraunhofer-Institute for Integrated Circuits IIS

HR Recruiting - **768028**

Am Wolfsmantel 33

91058 Erlangen

Preferably by e-mail (pdf-file): personalmarketing@iis.fraunhofer.de

For more information about the institute and its products have a look at: www.iis.fraunhofer.de