

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

**YES.**

We'll show you how at Fraunhofer IIS.

For the **»Audio and Media Technologies«** division in **Erlangen**, the Fraunhofer Institute for Integrated Circuits IIS is currently offering

## **Bachelor's Theses, Master's Theses and Scientific Internships**

### **for the Research Area »Speech and Audio Coding«**

Fraunhofer IIS has become known worldwide for its significant participation in the development of audio coding technologies like mp3 and AAC. More than 1,000 companies worldwide have licensed the audio technologies of Fraunhofer IIS and have now deployed more than seven billion products.

In the recent years, Fraunhofer IIS provided major contributions to the standardization and deployment of Extended High Efficiency AAC (<https://www.iis.fraunhofer.de/en/ff/amm/prod/digirundfunk/digirundf/xheaac.html>) , Enhanced Voice Services (<https://www.iis.fraunhofer.de/en/ff/amm/prod/kommunikation/komm/evs.html>) which bring high quality of both, speech and audio even at very low bitrates and MPEG-H 3D Audio for next generation TV broadcast. (<https://www.iis.fraunhofer.de/en/ff/amm/prod/digirundfunk/digirundf/tv-audio.html>).

We permanently advance our research in audio coding and processing topics, and we constantly improve our codecs in terms of perceptual quality and computational complexity. As such we embark in research in analytic signal processing as well as investigations into supervised learning techniques such as neural networks.

#### **Your profile: You ...**

- possess decent knowledge in Digital Signal Processing
- are interested in Psychoacoustics and Audio Signal Processing
- hold some programming experience in at least one of the following: C, Python, Matlab
- are highly motivated to learn, work on complex tasks, use creativity for solving problems
- have good English and communication skills

#### **What you can expect from us:**

- An open and friendly working environment in an international research institute
- Many opportunities to gain practical experience
- Flexible working hours that allow you to balance your research and study activities
- Guidance and support in your research
- Possibility to contribute with your own ideas and enjoy substantial creative leeway

In-depth work descriptions depend on the type of position you apply to, your abilities and other factors and will be provided if you inquire for a concrete position. The duration for the thesis should be at least 6 months and it can be started any time that suits you. The topic will be issued and assigned by a professor of your university in accordance with the rules of your university while Fraunhofer IIS will provide workplace and additional supervision in close cooperation with the professor. Please discuss the feasibility of such an external thesis with a professor disposed for external cooperation.

#### **Are you interested?**

Send your application in PDF, including cover letter, CV, latest transcripts of records, references and the date of your earliest possible start via e-mail to [personalmarketing@iis.fraunhofer.de](mailto:personalmarketing@iis.fraunhofer.de)

For more information about the institute and its products and services, please visit: [www.iis.fraunhofer.de/en](http://www.iis.fraunhofer.de/en), <http://www.audioblog.iis.fraunhofer.com>