For our IIS Labs in Erlangen we are looking for

**Interns and Student Assistants (m/f)**

For the development of Advanced Semantic Audio Coding Techniques

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**Your tasks performed in teams**

Perceptual audio coding techniques, such as the well-known mp3 and AAC, allow efficient transmission and storage of large media collections and they are deployed in a wide range of devices from smartphones to TV sets. Semantic audio coding technologies enable the media consumer to interact with the audio content while listening to it, for instance, to change the volume or even the position of individual instruments or talkers in an audio mix for creating a personalized listening experience. Next Generation Audio systems (e.g., ISO/IEC MPEG-H 3D Audio) combine perceptual and semantic audio coding techniques for providing the user a new immersive and interactive audio experience.

Fraunhofer IIS and the International Audio Laboratories Erlangen have openings in the development of next generation semantic audio coding technologies. The work focuses on investigating new directions in parametric multi-object coding for 3D audio, and in speech processing and intelligibility enhancement. The tasks include evaluation of the work by performing measurements and conducting listening tests using real-world content.

**You should have**

- a good knowledge of digital signal processing theory,
- a basic knowledge of matrix calculus and Matlab and/or Python,
- a basic knowledge of audio signal processing and most importantly,
- dedication in developing advanced multimedia processing algorithms as part of a team of innovative researchers.

We are also able to offer you the possibility to write your final thesis together with us. The theses are allocated and carried out according to the rules of the university you are enrolled at. Please confer with a professor of your choice, who is able to supervise it.

**What you can expect from us**

- An open and cooperative working environment
- Freedom to develop your own interests, knowledge, and skills

**Interested?**

Join our team and work with us on the technology of tomorrow!

Send your resume in PDF format to personalmarketing@iis.fraunhofer.de and reference 456905 and let us know how you learned about this opportunity.

For more information about the institute and its products and services, please visit: www.iis.fraunhofer.de