Interested in helping to shape the world of tomorrow?
The Fraunhofer Institute for Integrated Circuits IIS, one of the 67 application-oriented institutes that make up the Fraunhofer-Gesellschaft research network, is focused on providing the technological foundation for a wide range of innovative products.
The Moving Picture Technologies department, located in Erlangen, has an immediate opening for an

Intern or Student Assistant (m/f)
In the area CUDA- or OpenCL-based processing of Digital Cinema Packages

Already, most cinema screens worldwide have been digitized. At Fraunhofer IIS, we developed software solutions for the creation and playback of Digital Cinema Packages (DCPs). The format is currently being extended to accommodate for even higher quality, e.g. by allowing higher frame rates or higher data rates. Consequently, we have to continually optimize our software's performance in order to be able guarantee smooth real-time playback. On the encoding side, it is desirable to move as many processing steps as possible to the GPU in order to leverage its immense computing power. Furthermore, more and more device classes, aside from CPUs and GPUs, can be targeted with OpenCL and we want to evaluate them for our use cases.

Your tasks
- Familiarization with the JPEG 2000 compression standard or other image processing algorithms
- Porting existing image processing algorithms from C++ to CUDA or OpenCL as well as development of new processing steps
- Evaluation and documentation

Your profile
- Student in the field of Computer Science or a similar study
- Good knowledge of CUDA or OpenCL
- Experience with image compression or processing algorithms advantageous
- Experience with Qt-framework advantageous
- Flexibility and eagerness to work independently with new technologies

What to expect from us
- Diverse projects that are highly applicable to the real world
- An open and friendly work environment
- Sufficient opportunity to develop your interests and skills

Have we piqued your interest?
If so, we look forward to hearing from you. Send your complete application including CV and the available grade statement under reference code **265601**.
And please, don't forget to tell us how you heard about this opportunity.

If possible, please submit your application in PDF format via e-mail to:
personalmarketing@iis.fraunhofer.de
You can find additional information and career opportunities at: www.iis.fraunhofer.de