

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

**YES.**

We'll show you how at Fraunhofer IIS.

For the »**Moving Pictures Technology**« department in **Erlangen**, the Fraunhofer Institute for Integrated Circuits IIS is currently seeking a

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## Student Assistant / Intern / Thesis Student

### Recovering Geometry from Images using Deep Learning

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Recovering geometry information from multiple photos of an object is still a challenging task. Recently, many deep learning based approaches have been published, showing a huge potential of this technology for future VR, AR and 3D compositing applications.

To advance our research in this domain, we are looking for you to help us in evaluating the most promising approaches for geometry reconstruction from multiple images using deep learning.

For more information about our research, please refer to <https://www.iis.fraunhofer.de/lightfield> and to <https://www.iis.fraunhofer.de/en/profil/zukunftsiniciativen/dsai.html>.

**You are interested in 3D reconstruction and would like to develop further in the field of deep learning?**

**Then we have the right job for you! Your tasks:**

- Using existing source code, you train deep neural networks that are able to deliver geometry and color information of an object or a scene
- You evaluate the results using objective quality metrics
- You compare various approaches in terms of processing time, memory consumption and achievable quality

**Your profile:**

- You are currently studying electronics engineering, computer science, information and communication technologies or a related field
- You have experience in programming languages such as Python, MATLAB or C++
- You have experience with deep learning frameworks such as TensorFlow, PyTorch
- You have good knowledge in the area of multi-view image processing

**What you can expect from us**

- An interesting **application-oriented field of research** with innovative projects and a state-of-the-art laboratory environment
- Extensive professional support from **scientific mentors**
- **Flexible hours** that allow you to balance your studies and on-the-job experience
- An **open and friendly** work environment
- Sufficient opportunity to **develop your interests and skills**

Weekly working hours are determined by agreement. You can start from now on (as a student assistant: 10-20 hours a week or as an intern: for a period of at least three months).

We can also offer you the opportunity to complete a **student thesis** in conjunction with our institute in one of the aforementioned fields. The thesis will be assigned and carried out in accordance with the rules of your university. For this reason, please discuss the thesis with a professor who can advise you over the course of the project.

If you have any questions about this opening, please contact: Nico Prappacher (nico.prappacher@iis.fraunhofer.de).

### Interested?

Please apply for this position using the following link: <https://recruiting.fraunhofer.de/Vacancies/62285/Description/2>

Applications are possible **in German and English**. Please include a cover letter, your CV and your latest transcripts of records (as PDF) and quote ID number **62285-AME**. Address your application to Nina Wörlein.

Please let us know how you learned about this job opportunity.

Additional information is available on our website: [www.iis.fraunhofer.de/en](http://www.iis.fraunhofer.de/en)