

CAN I COMBINE SCIENCE AND BUSINESS IN A SINGLE JOB?

YES.

We'll show you how at Fraunhofer.



STARTING NOW, THE FRAUNHOFER INSTITUTE FOR APPLIED OPTICS AND PRECISION ENGINEERING OFFERS YOU AN EXCITING JOB OPPORTUNITY AS A

STUDENT ASSISTANT F/M IN THE FIELD OF "MULTIMODAL 3D SENSOR WITH MULTISPECTRAL CAMERA"

Fraunhofer is the largest organization for application-oriented research in Europe. Our fields of research are geared to the needs of people: health, security, communication, mobility, energy and environment.

The Fraunhofer Institute for Applied Optics and Precision Engineering IOF in Jena conducts application-oriented research in optical systems technology on behalf of industry and within the framework of publicly funded joint projects. The range of services offered by the Fraunhofer IOF includes system solutions, starting with new design concepts, through the development of technologies, manufacturing and measuring processes, to the construction of prototypes and pilot series for applications in the wavelength range from millimeters to nanometers.

To assist in the field of "Optical Systems" of the Fraunhofer IOF, we are looking for a student assistant (f/m) who deals with the investigation and demonstration of a novel real-time multimodal 3D sensor with multispectral cameras. The new technology is to be used, in particular, in forensic / forensics, 3D digitization and classification of art and cultural goods as well as object recognition in food production / agriculture.

Your Tasks

- Comparative studies on multi-spectral cameras for use in 3D sensor technology in different Spectral ranges VIS / SWIR (including multi-channel cameras, snap-shot cameras, and other)
- Integration of a multi-spectral camera into a 3D sensor
- Investigation of methods for the assignment of the 3D point cloud to multispectral data
- Studies on the spatial and spectral resolution
- Characterization of the novel system with regard to measuring accuracy and speed
- Comparative application tests

What we expect from you

- Field of study: photonics, physics, engineering or similar
- Basic knowledge of working in laboratories, scientific equipment and digital data processing
- You are motivated to learn how to control modern technologies, processes and processes in the field of optical sensors
- You are committed, team oriented and able to communicate well
- Your strengths include an independent, structured, flexible and reliable way of working

What you can expect from us

- Working in a collegial and open team
- Varying tasks in a dynamic work environment
- Flexible working hours

The remuneration is based on the collective agreement for the employment of auxiliary staff. In case of identical qualifications preference will be given to severely disabled candidates.

We would like to point out that the chosen job title also includes the third gender.
The Fraunhofer-Gesellschaft emphasises gender-independent professional equality.

Fraunhofer is Europe's largest application-oriented research organization. Our research efforts are geared entirely to people's needs: health, security, communication, energy and the environment.

We look forward to receiving your application! Please use our online application portal.

<http://www.iof.fraunhofer.com>

Job Reference: **IOF-2019-50**