Blickfeld
LiDAR / scan your world

Master Thesis Optics (m/f/d) Development and Validation of a LiDAR Sensor Model

part-time

Your mission

We develop and produce breakthrough LiDAR sensors for a wide range of applications in automotive, robotics, smart infrastructure, people counting and many more. If you're interested in optical sensors, you've come to the right place.

As part of the current development of a new product, in this thesis, a sensor model will be derived and validated. In addition to modeling the optical and electronic sensor components, one focus will be identifying and reproducing various error sources in the system, such as detector noise and daylight interference. In this thesis, you will get a deep understanding of modern LiDAR sensors and gain hands-on experience by validating your model with your own measurements.

Your tasks

- Develop a deep understanding of the optical and electronical elements of a modern LiDAR sensor
- Develop a detailed sensor model in Python
- Find possible error sources and implement them
- Plan and conduct measurements to validate your model

Your profile

- You are pursuing a master´s degree in electrical engineering, physics or a related subject
- You are interested in innovative optical measurement devices
- You are proficient in Python or Matlab and understand how to integrate your code into existing software projects
- You are creative and have an analytical mind

Interested?

Please send a short letter of motivation, your certificates and your CV.

We are looking forward to your application!

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https://www.blickfeld.com/career