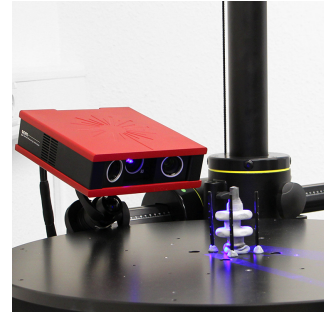


Bachelor thesis, master thesis, project thesis

Pattern Recognition for determination of rotation angles

Within the research project Modimo, methods for contactless torque measurement are being explored. The project aims to develop a technique that does not require modifications to the shaft surface. Instead, existing patterns on the shaft are utilized by identifying, characterizing, and locating them. This approach not only provides precise and reliable measurements but also facilitates integration into existing systems.



Your tasks

As part of a student research project (Bachelor's, undergraduate, or Master's thesis), an algorithm for the automatic detection and characterization of patterns on shaft surfaces should be developed and implemented. This can involve methods from classical image processing as well as machine learning. The scope of the work will depend on the duration of the project.

Possible subtasks for your project may include:

- Recording and preparing image data
- Conducting calibration processes
- Researching and implementing suitable algorithms (CV, ML, etc.)
- Planning and conducting own experiments
- Scientifically evaluating your own results

Your profile

- Enrolled in a technical field of study (Mechanical Engineering, Mechatronics & Robotics, Computer Science, Electrical Engineering, etc.)
- Interest in the topics of image processing and machine learning
- Programming skills in Python or C++ (or the motivation to acquire them)
- Willingness to engage scientifically with a research question

We offer

- Independent working
- Flexible working hours
- Well-equipped workstations
- Home office by arrangement
- Experiment execution
- Possibility of long-term collaboration



Bitte sende deine aussagekräftige Bewerbung in einer einzigen PDF-Datei an jobs@iph-hannover.de.

Die Bewerbung muss Anschreiben, Lebenslauf sowie Prüfungsleistungen des Studiums / Zeugnisse enthalten.

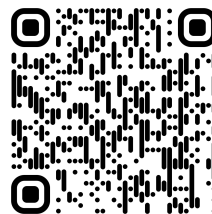
Contact



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