

Masterthesis or Internship: Sensorfusion for autonomous milling solutions

Manufacturing is still a very analog and manual industry. However, there are more and more tools and systems that are ready for the digital transformation and the trend towards autonomous systems is becoming a reality. At SCHUNK, we work on this problem and are looking for systems that adapt to changes in the manufacturing process.

Today, SCHUNK has develop a sensory tool holder that is able to measure the instabilities in milling and drilling processes. The logical next step in this context, is to add additional sensors in the machine, the clamping unit, and the spindle to get a better understanding of the processes. In this work, we plan to follow this path and equip multiple machines with different sensors. The goal is to perform sensor fusion from the different sensors and to be able to distinguish the causes of manufacturing problems and in a second step, also to prevent them.

Your task:

- Discover state-of-the-art in sensor fusion
- Develop concept for sensor fusion in milling and drilling processes
- Implement and test the algorithms on our AI edge platform

Your profile:

- Study computer science or a related topics suitable for ai and data science
- Basic skills in data science, ai and software development
- Good programming skills in python, ideally with experience in scikit, pytorch, or alike
- Motivated and curious character
- Structured and independent approach to work
- **Teamspirit**

We are happy to receive your application online. For specific questions, please contact Ms. Vanessa Feuerherdt at: 07133-103-2419

SCHUNK GmbH & Co. KG Spann- und Greiftechnik Frau Vanessa Feuerherdt Bahnhofstr. 106 - 134 D-74348 Lauffen/Neckar

Tel. +49-7133-103-2419 Fax +49-7133-103-942419 schunk.com













