



MASTER THESIS: GESTURE RECOGNITION ON NEUROMORPHIC HARDWARE

fortiss is the research institute of the Free State of Bavaria for software-intensive systems and services with headquarters in Munich. The institute currently employs around 180 employees, who collaborate on research, development and transfer projects with universities and technology companies in Bavaria, Germany and Europe. Research is focused on state of the art methods, techniques and tools of software development, systems & service engineering and their application to reliable, secure cyber-physical systems, such as the Internet of Things (IoT). fortiss has the legal structure of a non-profit limited liability company (GmbH). Its shareholders are the Free State of Bavaria (as majority shareholder) and the Fraunhofer Society for the Promotion of Applied Research. www.fortiss.org

In the Neuromorphic Computing department, we search for a

Master Student (non paid)

Your topic:

You will be integrated in a small team of neuromorphic computing researchers at fortiss. You will work on implementing gesture recognition with online few-shots learning on neuromorphic hardware (Intel Loihi), based on existing scientific papers. In the first phase of your thesis, you will read the state of the art and learn about the Loihi chip. In the second phase, you will implement the latest state-of-the-art paper on chip. In the final phase, you will, with your supervisor, define and if time permits, implement, research and improvement steps to extend and apply your code on simulated or real use cases, like guessing user intentions from gestures.

Your profile:

- Excellent bachelor degree in computer science, machine vision or software engineering
- Excellent track record in your current masters, especially in AI topics, preferably related with machine vision
- Fluency in software development (Python and/or C++)
- Interest or experience in machine vision, event-based cameras, sensors

Our offer:

- Work in partnership with leading companies in AI
- Offices in central Munich (Nordfriedhof) in very high and modern premises with 360° view on Munich
- Nice working atmosphere in a small team

Did we catch your interest?

Please submit your application with a motivational statement, a detailed CV and a current transcript of records to our job portal.

Job-ID: NC_MS_GEST_2021

Start date: from October 2021

Contact: Axel von Arnim