Student Assistant (m/f/)*

Anomaly Detection for IT Security

Anomaly detection techniques aim to identify rare or abnormal instances that significantly deviate from the notion of normal. This area of research is actively evolving and finds applications across various domains, including cybersecurity, computer vision, finance, or manufacturing. Anomaly detection is particularly useful for safeguarding AI systems; without the ability to detect and filter out abnormal inputs, AI systems may exhibit unpredictable behavior. At Fraunhofer AISEC, we are developing data-driven anomaly detection techniques applicable to diverse fields. Our current works focus on unsupervised and semi-supervised anomaly detection methods that utilize information generated by neural networks, such as activation values, to identify anomalies. As a working student, you will support our research projects focused on anomaly detection and have the opportunity to make a tangible impact within the research community.

Task Description

Your responsibilites in this role will encompass a variety of tasks, including:

- Conducting literature and trend research.
- Assisting in the development and implementation of anomaly detection algorithms.
- Evaluating and benchmarking anomaly detection algorithms.
- Contributing to project documentations and scientific publications.

Requirements

- Currently enrolled in a degree program in a related field.
- Experience and knowledge in machine learning.
- Proficiency in Python.
- Experience with deep learning frameworks such as PyTorch or TensorFlow.
- Strong problem-solving skills, highly motivated and able to work independently.

Contact

Please send your application with current CV and transcript of records to:

Wei Herng Choong

Fraunhofer Institute for Applied and Integrated Security (AISEC)

Cognitive Security Technologies

Lichtenbergstr. 11, 85748 Garching near Munich

Mail: wei.herng.choong@aisec.fraunhofer.de

Phone: +49 89 322 9986-1019

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