Announcement of student job (HiWi)
in Cooperation with Fraunhofer AISEC, Garching

Development of a distributed, machine learning based anomaly detection platform

Motivation
In cyber security, we are dealing with tremendous amount of anomalous activities, such as botnets, malware, web attacks, and Email spams. With the dramatically increasing size of data generated by different processes, it is of central challenging of processing all those information in a real-time way, such that suspicious behaviours can be discovered before they conduct hazard to the systems. Developing a real-time anomaly detection platform is therefore extremely valuable for different contexts in cyber security, such as in web traffic, connected vehicles and so on.

Task Description
In this work you will be actively involved in designing and developing a real-time anomaly detection platform, which is highly scalable and flexible and can be distributed and configured in various scenarios. You will be working with our core team together to build state of the art anomaly detection, where advanced techniques like Machine Learning and Deep Learning are used.

Requirements
- Strong programing skills in Python
- Experience with numeric computation and tools such as numpy, pandas, sklearn
- Experience with (applied) machine-learning
- Experience with Anomaly Detection is a plus
- Knowledge in network technologies, TCP/IP and IoT protocols is a plus
- Knowledge in IT Security is a plus

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