Master Thesis / Bachelor Thesis

IoT Security Risks and Mechanism with their Application in Agile Software Engineering

Fachhochschule

Motivation:

The Engineering of IoT Systems becomes more and more important in the industry. Thereby also the risks for misusage and data privacy as well as in the end safety is growing. At the same time most of the teams working on Systems and Software Products using an agile development approach. In this thesis an overview on existing security risks in the context of IoT should be worked out. Existing mechanisms to address these issues should be evaluated as well. Finally it should be clarified how these can be applied in an (Scaled) Agile development environment.

Task:

- Search for releated work on security in the area of IoT
    - Risks
    - Mechanisms
- Give a survey on the current state-of-art
- Identify gaps in the current work
- Integrade the existing mechanisms into (Scaled) Agile development methods
    - Scrum
    - SAFe

Requirements:

- Knowledge on R&D Processes, especially Agile Development is beneficial
- Knowledge on Security risks and mechanisms is beneficial
- Thesis can be written in German or English

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Wir geben Impulse

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