

Master Thesis

Cyber Security for agricultural machines and connected digital eco systems

Fachhochschule
Südwestfalen

University of Applied Sciences

South Westphalia Software Engineering Lab (SW²E Lab)

Motivation:

CLAAS E-Systems GmbH is the department of the CLAAS group responsible for the development of electronics and software for agricultural machines as well as the digital eco system. The data collected on machines is transferred to and processed in the eco system.

Today the topic security in connection with IoT products and especially connected machines and cars is in focus of the UN and EU. By this currently for example the Cyber Resilience Act is under development. In this thesis the impact of this and corresponding acts should be analyzed towards necessary adoptions for cyber security in Research & Development for agricultural machines and their digital eco systems.

Tasks:

- Analysis of Cyber Resilience Act and further acts towards relevance for agricultural, digital eco systems
- Analysis of attacking vectors of the digital eco system of CLAAS
- Definition of counter measures and development process adoptions to fulfill requirements in terms of Cyber Security

Requirements:

- Master Thesis is possible for students of Digital Technologies and Systems Engineering & Engineering Management
- Knowledge in Systems Engineering is beneficial
- Knowledge on System and Software Architecture is beneficial
- Knowledge on Cyber Security is beneficial

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Wir geben Impulse



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