Security Analysis of Home Assistant

Home automation is becoming more and more popular. Many companies sell sensors and actuators to automate lights, doors, vacuum robots, plant watering, etc. While many products rely on closed-source control software, which often lives in the cloud, there are also open-source alternatives. Open-source projects like Home Assistant aim to provide integration for home automation solutions of many different vendors and also to give full control to the user without compromising privacy or becoming dependant on specific operators.

A software that has so much data about peoples' personal lives should fulfill high security requirements. The goal of this thesis or project is to conduct a methodical security analysis of Home Assistant and to document the outcomes.

Suitable for students with an interest in security. A security background on the level of the Security in IT-Systems lecture is expected.