Topic and Goal of the Thesis

Modern E/E architectures and power supply systems are subject to constantly growing requirements. In order to meet these requirements, simulation-based development processes are now a central element of vehicle development. The vehicle components used here usually have a high number of parameters based on manufacturer specifications or benchmarking of already existing components. To achieve continuous availability and consistency of the data, central data management is essential.

To ensure this centralized management, a battery component database will be designed and implemented as part of the thesis and then made available via a REST API.

Working Points

• Design and implementation of a PostgreSQL based database for acquisition of vehicle components
• Development of a REST API for database access
• Evaluation, discussion, and documentation of the results

Requirements

• Good knowledge of German and English, both written and spoken
• Reliability, commitment and enjoyment of working independently
• Basic knowledge in python