# PLC Code Analysis using LLM (BA/SA)

Lehrstuhl für Automatisierung und Informationssysteme
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Aufgabenstellung:

Large language model (LLM) is an emerging technology. LLMs are applied across various fields, including arts, automobiles, medical services, and education. LLMs help process information more efficiently and produce human-quality outputs. Our work explores the potential of LLM applications in the automation domain, specifically in analyzing and programming PLC projects. Through this work, we will delve into PLC programming languages and LLMs to evaluate their compatibility and the possibilities for applying LLMs to PLC projects. By the end of this project, we aim to develop a trained and/or fine-tuned LLM tailored for PLC programming.
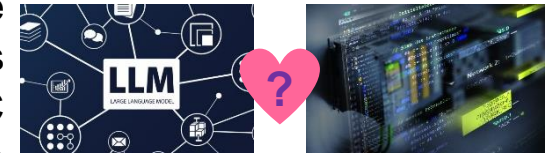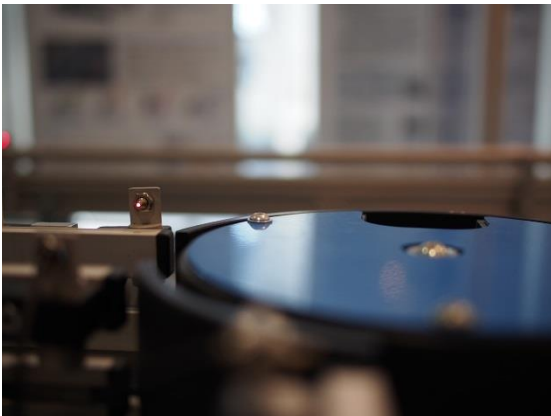
Your task:
- Research and select a proper LLM
- Identify the capabilities and limitations of LLM in domain PLC-Program
- Train or tune a mission-competent LLM

Kenntnisse:

- Basic knowledge of PLC programming and automation (in advantage)
- Interesst on LLM and basic knowledge of machine learning
- Independent and motivated

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