Design and Implementation of a demonstrator for MGSyn

(Bachelor thesis / Hiwi student position for bachelor/master students)

Introduction

MGSyn (http://www6.in.tum.de/~chengch/mgsyn) is the research tool targeted to perform automatic code-generation for industrial automation systems using game-based synthesis techniques. For dissemination, we hope to develop a low-cost demonstrator from Fischer Technik which enables other research institutes to evaluate and experience our advanced results.

Work Package

- Understand the hardware, and assemble concrete components.
- Understand its library for controller programming.
- Understand the Eclipse Modeling Framework.
- Describe the assembled model using the modeling feature of MGSyn.
- Implement the automatic translating scheme by extending MGSyn.
- Write the complete manual for the process.
- (Optional) Submit a short paper or a poster to conferences in verification.

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