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Diplomarbeit / Master Thesis

Context-based Manufacturing Processes

Manufacturing processes need to be updated regularly to stay competitive in the market. With the emergence of Internet of Things, the manufacturing processes can be made smarter, that is, they can possibly adapt themselves to the execution context. In each context, there can be multiple alternatives for the same process goals and the best needs to be selected.

The goals of the thesis are:

- Analysis of Industry 4.0 and its trends
- Analysis of Internet of Things in the context of Industry 4.0
- Design and implementation of a platform for supporting context-based manufacturing processes

Requirements

The applicant should be fluent in Java and be willing to apply theoretic concepts in practice. Knowledge of workflow languages is desirable.

Benefits

When finishing the thesis, you will have deep knowledge in BPMN or BPEL and the trends of Industry 4.0 and Internet of Things.

Formal Requirements

The student has to manage his schedule including the work packages and milestones for himself. The preferred language of the work is English but German is also possible.

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