

Aufgabenstellung für die Masterarbeit

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Studiengang: Master DSE

Matr. Nr.: 4 7 3 3 6 5 7

Thema:

Compositional Multi-objective Parameter Tuning

Zielstellung :

State-of-the-art approaches to multi-objective parameter tuning are using predefined models to describe the search space and to navigate through it. These approaches lack variability and cannot be finely tuned. The goal for this thesis is to provide a mechanism of a fine-grained model composition within the parameter tuning software product line. The research objective is to identify and develop the strategies that can decompose multi-objective approaches into a compositional model consisting of multiple single-objective models; thus, enhancing the state-of-the-art single-objective parameter tuning approaches with multi-objectivity.

For this thesis, the following tasks have to be fulfilled:

- Literature analysis covering closely related work.
- Identification of suitable strategies for composition of single-objective parameter tuning models.
- Implementation of the aforementioned strategies.
- Evaluation of the developed approach based on synthetic benchmarks and real world scenarios.

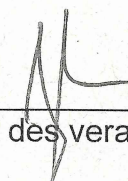
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