

Ingenieurspraxis, Interdisciplinary Project, Master's Thesis, Bachelor's Thesis

Machine Learning and Neural Networks' Applications in Microfluidics

Machine learning (ML) is taking an important role in our lives these days, which has been widely used in many scenarios. ML methods, including traditional and deep learning algorithms, achieve amazing performance in solving classification, detection, and design space exploration problems.

In recent years, ML for design automation is becoming one of the trending topics and a lot of studies that use ML to improve DA methods have been proposed, which cover almost all the stages in the chip design flow, including design space reduction and exploration, logic synthesis, placement, routing, testing, verification, manufacturing, etc. These ML-based methods have demonstrated impressive improvement compared with traditional methods. In this project, we want to explore and exercise the applications of machine learning and neural networks used for microfluidics design automation.

Contact

If you are interested in this topic, please send your current transcript along with your CV and a short motivation to one of the supervisors' email:

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