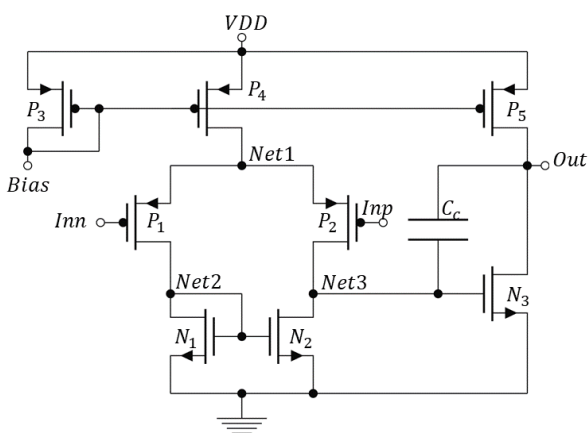


Master Thesis/Bachelor Thesis/Internship

Testing of Different Optimization Algorithms for Solving the Sizing Problem of Analog Circuits



Analog circuits are a major part in integrated systems. However, the design automation lacks behind the digital one. To automate the initial sizing of

analog circuits, a tool is developed at the Institute of Design Automation. In the moment this tool uses the Constraint Library GeCode to find the optimal component dimension of the circuit. However, analyzing bigger circuits, the runtime of the search algorithm gets quite large. Thus, other constraint libraries, like MINION, and optimization algorithm, as for example implemented in Matlab, should be tested for a better runtime behavior.

Task:

- Programming an interface between the automatic sizing tool implemented in C++ and Matlab/MINION
- Testing the optimization algorithms on different example circuits

Requirements:

- Interest or experience in analog circuits
- Basic knowledge of C++ advised
- Basic knowledge of Matlab advised
- Familiar with Cadence Virtuoso

If you are interested please contact me:
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