

Bachelor's Thesis / Master's Thesis

Efficient DNN Implementation on FPGA: Bring your own use case!

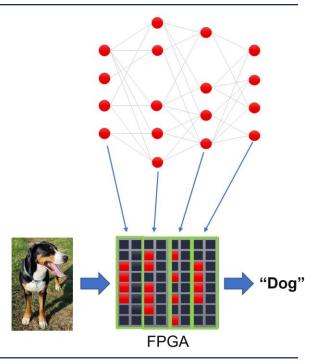
You have an interesting idea for a deep neural network application that demands fast & efficient inference on an embedded compute platform? That might make a great thesis topic – talk to us! We are highly interested in applying DNN to use cases in several domains, for example medical, industrial, or mobile. Your thesis project would include training and optimization of a DNN, and the implementation of an FPGA-accelerated prototype using the Xilinx FINN framework and/or other existing tools.

Type of project

- Seeking out and pre-processing data
- Training and optimizing lightweight neural networks
- Implementing FPGA accelerators with high-level tools

Prerequisites

- Basic ML and DNN knowledge
- Experience with Python, Pytorch, and Xilinx tools is helpful





Supervisor
Felix Jentzsch, 03 122
felix.jentzsch@uni-paderborn.de

