



Bachelor Thesis

Streamlining of HW/SW Co-Design Pipeline for Embedded Vision Systems

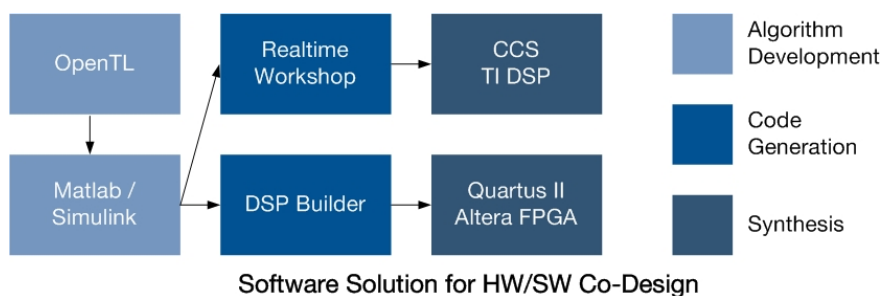
Motivation

Embedded vision systems impose great challenges to system developers because of the heterogeneous characteristics of the involved software and hardware design tools. To speedup the design process, efforts of code maintenance and transfer between different platforms need to be minimized.

Task

In this thesis, the student will acquire hand-on experiences of the whole design process of embedded vision systems, with focus on interfacing the currently isolated design platforms, which includes:

- Interfacing the vision algorithms in C++ to Matlab using Mex-files
- Conversion of Matlab models into DSP codes via Real-time Workshop
- Evaluate the advantages of system-level modeling language like SystemC against the existing method



Supervisor

Prof. Dr.-Ing. Alois Knoll

Advisor

Yang Chen, M.Sc

Research Project

AMIS

<http://www6.in.tum.de/Main/ResearchAmis>

Area

Embedded Systems, Software Engineering

Required Skills

C++, Matlab

Contact

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