Project proposal (Advanced Computer Architectures)

OpenCRun: An Open-Source OpenCL Runtime

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Size of the project: 1-2 student(s)

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Abstract

This project focuses on updating an OpenCL runtime designed at Politecnico di Milano, called OpenCRun, to support new version of the LLVM compiler framework.

Pre-requirements

- Intermediate knowledge of C++11 language and idioms
- Basic Linux skills
- [preferred] previous experience with OpenCL

Involved Technologies and Frameworks

- LLVM
- C++11
- OpenCL

Detailed description

This project will start from the existing OpenCL runtime, OpenCRun, developed at Politecnico di Milano, based on the LLVM compiler framework (version 3.4).

The goal is to have OpenCRun updated to the current version of LLVM (version 6.0.0). This project can be extended to thesis.