

Climbing Mont Blanc - a Prototype System for Training in Energy Efficient Programming

Thursday, 25 February 2016 15:00 (25 minutes)

Climbing Mont Blanc (CMB) is an open online judge used for training in energy efficient programming of state-of-the-art heterogeneous multicores. It is based on an Odroid-XU3 board with an Exynos Octa processor and integrated power sensors. The system currently accepts C and C++ programs, with support for OpenCL v1.1, OpenMP 4.0 and Pthreads. Programs submitted using the graphical user interface are evaluated with respect to performance and energy-efficiency. A small and varied set of problems are available. We are not aware of any other online programming judges that reports energy-efficiency. The talk will present some early experience from using the CMB system, potential opportunities for collaboration and future work. Our long term goal is to learn more about energy-efficient computing on handheld devices from submissions to the system.

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