



## COMMUNICATION

+41 (0)91 610 82 34  
communication@cscs.ch

# PRESS RELEASE

Lugano, 2 March 2016

## CSCS Announces Second GPU Hackathon

General-purpose Graphics Processing Units (GPGPUs) potentially offer exceptionally high memory bandwidth and performance for a wide range of applications. The challenge in utilizing such accelerators has been the difficulty in programming them. Today, these devices can be programmed with the [CUDA/C++ programming platform](#) or with OpenACC Directives for Accelerators, which offer straightforward extensions to C++ and Fortran to address this programming hurdle.

### Workshop Goal

EuroHack provides the opportunity for current or prospective users groups of large hybrid CPU-GPU systems to either (1) port their (potentially) scalable application to GPU accelerators, or (2) optimize an existing GPU-enabled application, on a state-of-the-art GPU system. The goal is that the development teams leave at the end of the week with applications running on GPUs, or at least with a clear roadmap of how to get there. Our mentors come from national laboratories, universities and vendors, and have extensive experience in programming GPUs.

### Target Audience and Format

We're looking for teams of 3-5 developers with a scalable application to port to or optimize on a cluster of GPU accelerators. Collectively the team should know the application intimately. There will be intensive mentoring during this 5-day hands-on workshop. Our mentors come from national laboratories, universities and vendors, and besides having extensive experience in programming GPGPUs, many of them develop the GPU-capable compilers and help define the OpenACC standard. Space will be limited to 5 teams, with 2 mentors for each team.

### How to Attend

The application period is now open. Prior GPU experience is not required! The team coordinator needs to fill out the [application on the "2016 GPU Hackathons" website](#) by March 20, 2016. Space will be limited to 5 teams, with 2 mentors for each team. Groups will be notified about acceptance or rejection of their application by Wednesday, April 6, 2016. Groups whose application successfully passes the selection process will need to register for the event to confirm participation within one week from notification of acceptance. The notification of acceptance will include information on how to register.

### What applications is EuroHack targeting?

No application specifically. We hope to have open-source community codes in need of porting individual modules. This is a great opportunity for grad students and post-docs.

### What is in it for the participants?

Besides your code running lightening fast on a hybrid CPU-GPU machine like the CSCS Piz Daint platform? During the workshop, we will enable your amazing transformation to GPU



**CSCS**

Centro Svizzero di Calcolo Scientifico  
Swiss National Supercomputing Centre

programmer and present your team with a certificate in front of your admiring fans. There will also be a workshop outing in scenic Lugano one afternoon during the height of the Ticino summer and the opportunity to visit the CSCS Computing Facility.

**Whom can I contact for more information or questions?**

Please contact William Sawyer ([wsawyer@cscs.ch](mailto:wsawyer@cscs.ch)) for questions related to the EuroHack content, or Tatjana Ruefli ([ruefli@cscs.ch](mailto:ruefli@cscs.ch)) for questions related to the workshop logistics.

**Venue**

EuroHack16 will be hosted at Hotel de la Paix, located in Lugano, Italian area of Switzerland. The hotel will allow 24h access to the meeting rooms so that the selected teams can work on their project at their convenience.

**Participation costs**

Participation in the workshop is free of charge. The meeting room and lunches, as well as access to the supercomputers throughout the event are offered by the Swiss National Supercomputing Centre (CSCS). Mentors and learning materials introduced by the instructors are sponsored by CSCS, NVIDIA, Oak Ridge National Laboratory and other partner organizations.

Please note that registration to the event on CSCS website is compulsory.

Participants are responsible for their travels to the meeting venue, their accommodation, meals not included in the program, and personal expenses.