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CERN openlab / Intel Spring 2012 Multi-threading and Parallelism Workshop [1]

Date:
Monday, 4 June, 2012 - 09:00 to Tuesday, 5 June, 2012 - 17:00

As computing technologies enter the many-core era, it is more apparent than ever that the future of computing lies in the effective utilization of parallel and many-core architectures. Since this significant change in computing is already well underway, it is highly beneficial for programmers to be aware of the opportunities and dangers which lie ahead.

Another instance of the classic Multi-threading and Parallelism Workshop will be held on the 4 th and 5th of June at CERN. An Intel expert and several openlab staff will lead the two day event and help you improve your knowledge by explaining the key intricacies of parallel programming and presenting the most efficient solutions to popular multi-threading problems. Two sessions of hands-on labs are also planned where participants will be able to improve their understanding of multi-threaded programming methodologies and learn to use tools for debugging and profiling multi-threaded applications. Non-expert users should feel more than welcome, as the course is a great opportunity to improve their knowledge.

Event highlights:

- Day 1, AM: Lectures
  - Fundamental aspects of multi-threaded and parallel computing
  - The move to many-core and its impact on software
  - Important parallelism and multi-threading concepts and technologies
- Day 1, PM: Hands-on lab #1
- Threading Tools overview
- Parallel programming exercises in Linux environments

- Day 2 AM: Lectures
  - NUMA and inter-node communication discussion
  - Advanced threaded programming methodology and scalability issues
  - Further discussion on tools and technologies
  - New directions and CERN-specific parallelism related topics

- Day 2 PM: Hands-on lab #2
- Parallel programming exercises in Linux environments

Pre-requisites:

- Familiarity with the C or C++ programming language
- Basic knowledge of Linux

The workshop is organized by CERN openlab for users affiliated with CERN, **free of charge at this time**. Registrations are based on a first-come first-served basis ? 40 seats are available for the lectures but less seats are foreseen for the labs ? please indicate whether the lectures or both the lectures and labs are of interest to you during registration. Go to EDH (https://edh.cern.ch/Document/TRN/new?course=083MUL01 [2]) in order to register. All registrations will be confirmed by e-mail ? a registration in EDH **does not yet guarantee a place in the workshop**. Contact openlab.workshops@cern.ch [3] for further information.

Indico or other event webpage:
Register in EDH [2]

- Visit Us
- RSS Feeds

Links
[1] http://test-static-05.web.cern.ch/news/cern-openlab-intel-spring-2012-multi-threading-and-parallelism-workshop
[2] https://edh.cern.ch/Document/TRN/new?course=083MUL01
[3] mailto:openlab.workshops@cern.ch