PUMPS Summer School 2014

Objectives

- Instructors Wen-mei Hwu (University of Illinois) and David B. Kirk (NVIDIA), co-authors of “Programming Massively Parallel Processors, A Hands-on Approach”, will provide students with knowledge and hands-on experience in developing applications software for many-core processors, such as general purpose graphics processing units (GPUs).

- By the end of the summer school, participants will:
  - Be able to design algorithms that are suitable for accelerators.
  - Understand the most important architectural performance considerations for developing parallel applications.
  - Be exposed to computational thinking skills for accelerating applications in science and engineering.
  - Engage computing accelerators on science and engineering breakthroughs.

Requirements

Prerequisites for the course are:

- C, C++, Java, or equivalent programming knowledge.
- Skills in parallel programming will be helpful.
- Some experience in CUDA programming will be considered very valuable for application consideration.

Visit the Previous Material section at the PUMPS website and spend some time self-learning. You can also consider attending PATC course: Introduction to Programming in CUDA (2 to 6 June)

Programming and Tuning Massively Parallel Systems

The fifth edition of the Programming and Tuning Massively Parallel Systems summer school (PUMPS) is aimed at enriching the skills of researchers, graduate students and teachers with cutting-edge technique and
hands-on experience in developing applications for many-core processors with massively parallel computing resources like GPU accelerators.

**Summer School Co-Directors:** Mateo Valero (BSC and UPC) and Wen-mei Hwu (University of Illinois at Urbana-Champaign)

**Organized by:**
Barcelona Supercomputing Center (BSC)
University of Illinois at Urbana-Champaign (University of Illinois)
Universitat Politecnica de Catalunya (UPC)
HiPEAC Network of Excellence (HiPEAC)
PUMPS is part of this year PRACE Advanced Training Centre program

[SUBMITT the PUMPS Application Request Form]

**Comments:**

Please apply to the summer school by submitting the PUMPS Application Request Form. Please note that there will be a selection process.

For more information please visit PUMPS website

[Materials]

The course materials are published on the PUMPS website

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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