[HYBRID] Introduction to CUDA Programming

Objectives

The aim of this course is to provide students with knowledge and hands-on experience in developing applications software for processors with massively parallel computing resources. In general, we refer to a processor as massively parallel if it has the ability to complete more than 64 arithmetic operations per clock cycle. Many commercial offerings from NVIDIA, AMD, and Intel already offer such levels of concurrency. Effectively programming these processors will require in-depth knowledge about parallel programming principles, as well as the parallelism models, communication models, and resource limitations of these processors.

This course will also provide very good introduction to the **PUMPS Summer School run jointly with NVIDIA** (as this school has attendee selection process). Further information on the 2023 PUMPS Summer school will follow soon.

You may also be interested in our **Introduction to OpenACC** course.

Requirements

Basics of C programming and concepts of parallel processing will help, but are not critical to follow the lectures.

Please download and carefully read the following **instructions** regarding the logistics participants enrolling online PATC at BSC are expected to follow.

Speakers

Marc Jordà, Leonidas Kosmidis, Antonio J. Peña, Accelerators and Communications for High Performance Computing Group, Computer Sciences, BSC

Academic Staff

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Course convener: Antonio Peña, Accelerators and Communications for High Performance Computing Group Manager, Computer Sciences, BSC
Lecturers

: Marc Jordà, Leonidas Kosmidis, Antonio J. Peña, Accelerators and Communications for High Performance Computing Group, Computer Sciences, BSC

Further information

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All PATC Courses at BSC do not charge fees.

In the context of virtual meetings, the Organiser may facilitate live webstreaming and audio recording. You have the option to opt out of inclusion in recordings by contacting our Education&Training team.

CONTACT US for further details about MSc, PhD, Post Doc studies, exchanges and collaboration in education and training with BSC.
For further details about Postgraduate Studies in UPC - Barcelona School of Informatics (FiB), visit the website

Sponsors: BSC fund the PATC @ BSC training events.

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