VSB TECHNICAL
UNIVERSITY
OF OSTRAVA

IT4INNOVATIONS
NATIONAL SUPERCOMPUTING
CENTER

PRACE

Fundamentals of Accelerated Computing with CUDA C/C++

February 5, 2020
VSB – Technical University of Ostrava
IT4Innovations

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The CUDA computing platform enables the acceleration of CPU-only applications to run on the world's fastest massively parallel GPUs. You experience C/C++ application acceleration by:
- Accelerating CPU-only applications to run their latent parallelism on GPUs
- Utilizing essential CUDA memory management techniques to optimize accelerated applications
- Exposing accelerated application potential for concurrency and exploiting it with CUDA streams
- Leveraging command line and visual profiling to guide and check your work.

The lectures are interleaved with many hands-on sessions using Jupyter Notebooks.
The exercises will be done on a fully configured GPU-accelerated workstation in the cloud.

This training is a part of **NVIDIA AI & HPC ACADEMY 2020.**

AGENDA

09:00-09:20 | Introduction
09:20-11:00 | Part1: Accelerating Applications with CUDA C/C++
11:00-11:15 | Coffee Break
11:15-13:00 | Part1: Continued
13:00-14:00 | Lunch
14:00-15:30 | Part2: Managing Accelerated Application Memory with CUDA Unified
                        Memory and nvprof
15:30-15:45 | Coffee Break
15:45-16:50 | Part3: Asynchronous Streaming and Visual Profiling for Accelerated
                        Applications with CUDA C/C++
16:50-17:00 | Q&A, Final Remarks

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More information & registration:
events.it4i.cz/event/40/