NVIDIA DLI Workshops 2019

ACCELERATED COMPUTING WITH CUDA C/C++

ARCHITECTURE, PROGRAMMING AND TOOLS

Contents: The CUDA computing platform enables the acceleration of CPU-only applications to run on the world's fastest massively parallel GPUs. 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

Upon completion, you'll be able to accelerate and optimize existing C/C++ CPU-only applications using the most essential CUDA tools and techniques. You'll understand an iterative style of CUDA development that will allow you to ship accelerated applications fast.

Prerequisites: Basic C/C++ competency including familiarity with variable types, loops, conditional statements, functions, and array manipulations.

Technologies: C/C++, CUDA

Instructor: Luigi Troiano

Monday 25 November 2019, 10:30am
Università degli Studi di Napoli Federico II
Softel room, via Claudio 21, Building 3, 1st floor

DEEP LEARNING FOR COMPUTER VISION

CLASSIFICATION, SEGMENTATION AND RECOGNITION

Contents: Explore the fundamentals of deep learning by training neural networks and using results to improve performance and capabilities.

In this workshop, you'll learn the basics of deep learning by training and deploying neural networks. You'll learn how to:

- Implement common deep learning workflows, such as image classification and object detection
- Experiment with data, training parameters, network structure, and other strategies to increase performance and capability
- Deploy your neural networks to start solving real-world problems

Upon completion, you'll be able to start solving problems on your own with deep learning.

Prerequisites: Familiarity with basic programming fundamentals such as functions and variables

Technologies: Caffe, DIGITS

Instructor: Luigi Troiano

Monday 16 December 2019, 9:30am
Università degli Studi di Napoli Federico II
Softel room, via Claudio 21, Building 3, 1st floor

Registration required at: https://workshops.nvidia-dli.ciselab.org/

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