Fast Lane

Fundamentals of Accelerated Computing with CUDA Python (FACCP)

ID FACCP   **Price** on request   **Duration** 1 day

Prerequisites

- Basic Python competency, including familiarity with variable types, loops, conditional statements, functions, and array manipulations
- NumPy competency, including the use of ndarrays and ufuncs
- No previous knowledge of CUDA programming is required

Course Objectives

At the conclusion of the workshop, you'll have an understanding of the fundamental tools and techniques for GPU-accelerated Python applications with CUDA and Numba:

- GPU-accelerate NumPy ufuncs with a few lines of code.
- Configure code parallelization using the CUDA thread hierarchy.
- Write custom CUDA device kernels for maximum performance and flexibility.
- Use memory coalescing and on-device shared memory to increase CUDA kernel bandwidth.

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Training Centres worldwide

Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch