

Programming Multi-core using FastFlow

During this tutorial session, the participants will learn how to build application structured as a combination of stream-based parallel pattern like pipeline, task-farm loops and their combinations. Then more high-level patterns will be introduced such as `parallel_for`, `map` and `reduce`, and we will see how to mix stream and data-parallel patterns to build simple (and not so simple) applications. During the tutorial different possible implementations will be discussed. Finally we will give the participants the opportunity to implement multi-threading algorithms and simple benchmark and to evaluate their performance.

Desirable Prerequisite:

Good knowledge of C

Basic knowledge of C++ templates (basic C++11 features will be also used)

Basic knowledge of multi-threading programming

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Track Classification: Modern Programming