15th JLESC Workshop



Contribution ID: 54

Type: Short talk

Using coroutines in a task-based runtime system

Thursday 23 March 2023 14:50 (10 minutes)

This talk will focus on the design of device support in the Template Task Graph. Specifically, TTG employs C++ coroutines to suspend tasks during times of data motion and kernel execution. This design allows TTG to support transparent device memory oversubscription by delegating memory management to the underlying PaRSEC runtime system. TTG will also offer coroutines as a means for describing successor tasks. Open questions of this talk are on the general use and acceptance of coroutines and the treatment of memory oversubscription in task-based runtime systems.

JLESC topic

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Session Classification: Short Talks on Tasking

Track Classification: Programming languages and runtimes