Inter–block synchronisation on a GPGPU

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1. Device, capable of running data- and task- parallel work.

2. Stream Cores, execute program on an independent data stream.

3. Processing Elements, units that perform basic operations.
Each Work-group has many Work-items which are executed in parallel.

Synchronization between work-items is possible by accessing shared local-memory on GPGPU.

Synchronization between Work-Groups requires going back to CPU which is time costing.
Learn AMD Opencl programming language.
Implement inter-block algorithms using Opencl.
Resolve deadlock problem raised by Wang.
Test and record code performance.

End of Presentation
Q & A