NPTEL Video Course - Computer Science and Engineering - NOC:GPU Architectures and Programming

Subject Co-ordinator - Prof. Soumyajit Dey

Co-ordinating Institute - IIT - Kharagpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Review of basic COA w.r.t. performance
Lecture 2 - Review of basic COA w.r.t. performance
Lecture 3 - Review of basic COA w.r.t. performance
Lecture 4 - Review of basic COA w.r.t. performance
Lecture 5 - Intro to GPU architectures
Lecture 6 - Intro to GPU architectures
Lecture 7 - Intro to GPU architectures
Lecture 8 - Intro to GPU architectures
Lecture 9 - Intro to CUDA programming
Lecture 10 - Intro to CUDA programming (Continued...)
Lecture 11 - Intro to CUDA programming (Continued...)
Lecture 12 - Intro to CUDA programming (Continued...)
Lecture 13 - Multi-dimensional mapping of dataspace; Synchronization
Lecture 14 - Multi-dimensional mapping of dataspace; Synchronization (Continued...)
Lecture 15 - Multi-dimensional mapping of dataspace; Synchronization (Continued...)
Lecture 16 - Warp Scheduling and Divergence
Lecture 17 - Warp Scheduling and Divergence (Continued...)
Lecture 18 - Warp Scheduling and Divergence (Continued...)
Lecture 19 - Memory Access Coalescing
Lecture 20 - Memory Access Coalescing (Continued...)
Lecture 21 - Memory Access Coalescing (Continued...)
Lecture 22 - Memory Access Coalescing (Continued...)
Lecture 23 - Memory Access Coalescing (Continued...)
Lecture 24 - Memory Access Coalescing (Continued...)
Lecture 25 - Memory Access Coalescing (Continued...)
Lecture 26 - Memory Access Coalescing (Continued...)
Lecture 27 - Memory Access Coalescing (Continued...)
Lecture 28 - Optimizing Reduction Kernels
Lecture 29 - Optimizing Reduction Kernels (Continued...)