

Parallel & Distributed Computing: Lecture 35

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3 2. CUDA Execution Model

4 3. CUDA Memory Model

5 4. Starting CUDA Optimization

6 CuArrays.jl

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Hardware view

CuArrays.jl

CuArrays.jl

CuArrays.jl provides a fully-functional GPU array, which can give significant speedups over normal arrays without code changes. CuArrays are implemented fully in Julia, making the implementation elegant and extremely generic

Read chapter 7 of book:

Avik Sengupta, [Julia High Performance](#): Optimizations, distributed computing, multithreading, and GPU programming with Julia 1.0 and beyond, 2nd Edition, Pakt>, 2019

Getting started with GPUs

CUDA, PTX and its use from Julia

CuArrays - Arrays on the GPU

Analyzing the performance of GPU code