

Csci 557: GPU Computing Computer & Information Science

This course examines the use of GPU for general-purpose high performance parallel computing. It covers the key principles, practices, and hardware/software architectures for design of general-purpose, parallel programs using GPUs. The course surveys and analyzes real-world applications that benefit from GPUs, and involves hands-on programming as well as performance profiling and analysis. The fundamentals of concurrent programming and its challenges at algorithm and coding levels are also discussed.

3 Credits

Prerequisites

• Pre-requisite (Csci 211 and Csci 223) OR (El E 385 and Csci 356) OR Graduate Standing

Instruction Type(s)

• Lecture: Lecture for Csci 557

Subject Areas

• Computer Science

