

**THE DEPARTMENT OF COMPUTER SCIENCE & THE COMPUTER SCIENCE
GRADUATE STUDENT ORGANIZATION (GSOCS) PRESENT**

INVITED SPEAKER SERIES

co-sponsored with GSO and partially paid for by student activity fees

**Professor David Kaeli
Northeastern University**

Wednesday, September 27th at 12 noon, Lecture Hall 7

A Cross-layer Approach to Accelerating Heterogeneous Computing

Abstract: GPU computing is alive and well! The GPU has allowed researchers to overcome a number of computational barriers in important problem domains. But still, there remain challenges to use a GPU to target more general purpose applications. GPUs achieve impressive speedups when compared to CPUs, since GPUs have a large number of compute cores and high memory bandwidth. Recent GPU performance is approaching 10 teraflops of single precision performance on a single device. In this talk we will discuss current trends with GPUs, including some advanced features that allow them exploit multi-context grains of parallelism. Furth