

Department of Computer Science and Engineering

Presents the Faculty Candidate

Ben Moseley

University of Illinois Urbana Champaign

Algorithms for Scheduling and Large Data Analysis

In this talk we will be concerned with designing algorithms for schedulers and MapReduce. The first part of the talk will be on scheduling algorithms. We will discuss recent developments on scheduling models and performance metrics. Our focus will be on the recent direction of scheduling research and how it compares to past work.

The second portion of the talk will focus on designing algorithms for large data analysis using MapReduce. Recently, the MapReduce parallel computing framework has become the de facto standard for processing large data. In this talk we discuss the theoretical model of the MapReduce framework. The constraints of the MapReduce model pose several algorithmic challenges. We will introduce recent developments and key research questions related to the theoretical foundations of MapReduce. We will then introduce some algorithmic ideas that can be used to design algorithms for MapReduce.

Ben Moseley is currently a PhD candidate in the University of Illinois Urbana Champaign (UIUC) and is planning on graduating this May. Ben obtained his M.S. (2008) and B.S. (2006) in computer science at UIUC. While at UIUC, Ben interned at Yahoo! Research during the summers of 2010 and 2011. Ben received the Best Student Paper award at SODA 2010.

Thursday, February 9, 2012 @ 3:30 pm

Davis 113A - University at Buffalo – North Campus