# The University at Buffalo
# Department of Computer Science and Engineering

*Distinguished Speaker Series Presents*

## Emerging Trends in Big Data Software and the Berkeley Data Analytics Stack

*featuring*

## Michael Franklin, UC Berkeley and U Chicago



Big Data software has created quite a stir recently, largely driven by open source environments such as Hadoop and Spark. In this talk, I'll begin by giving an overview of one such environment, the Berkeley Data Analytics Stack (BDAS), which we have been building over the past 6 years at the UC Berkeley AMPLab. BDAS has served as the launching platform for Spark, Mesos, Tachyon, GraphX, MLlib and other popular systems. I will then survey some recent trends in such software including: ntegrated systems vs. silos, real-time analytics, machine learning model serving, internet of things, cloud-hosted analytics and the convergence of high-performance computing and big data processing and describe how these trends are impacting the development of BDAS. Throughout the talk I will make the case that the rise of open source software for data analytics and other areas provides computer science researchers in academia with unprecedented opportunities for direct impact and testing of new ideas.

Bio: Michael Franklin is the Thomas M. Siebel Professor of Computer Science and former Chair of the Computer Science Division at the University of California, Berkeley. Prof. Franklin is also the Director of the Algorithms, Machines, and People Laboratory (AMPLab), an NSF CISE Expedition in Computing center at UC Berkeley. The AMPLab currently works with nearly 30 industrial sponsors including founding sponsors Amazon Web Services, Google, IBM, and SAP. AMPLab is well-known for creating a number of popular systems in the Open Source Big Data ecosystem. Prof. Franklin is a co-PI and Executive Committee member for the Berkeley Institute for Data Science, part of a multi-campus initiative to advance Data Science Environments and a PI of the NSF Western Region Big Data Innovation Hub. He is an ACM Fellow, a two-time winner of the ACM SIGMOD "Test of Time" award, has several recent "Best Paper" awards and two CACM Research Highlights selections, and is recipient of the outstanding Advisor Award from the Computer Science Graduate Student Association at Berkeley. In summer 2016 he will be joining the University of Chicago to initiate a major new effort in Data Science and as Chair of Computer Science.

# Free Seminar - Open to the Public - Refreshments

# Thursday, May 5, 2016

# 3:30 PM – Student Union Theatre