Distributed Data Streams and the Power of Geometry

(Keynote)

Minos Garofalakis
Technical University of Crete
minos@softnet.tuc.gr

ABSTRACT

Sequences arise in many online and offline settings: urls to visit, songs to listen to, videos to watch, restaurants to dine at, and so on. User-generated sequences are tightly related to mechanisms of choice, where a user must select one from a finite set of alternatives. In this talk, we will discuss a class of problems arising from studying such sequences and the role discrete choice theory plays in these problems. We will present modeling and algorithmic approaches to some of these problems and illustrate them in the context of large-scale data analysis.

Biography

Minos Garofalakis received the M.Sc. and Ph.D. degrees in Computer Science from the University of Wisconsin-Madison in 1994 and 1998, respectively. He worked as a Member of Technical Staff at Bell Labs (1998-2005), as a Senior Researcher at Intel Research Berkeley (2005-2007), and as a Principal Research Scientist at Yahoo! Research (2007-2008). In parallel, he also held an Adjunct Associate Professor position at the EECS Department of the University of California, Berkeley (2006-2008). As of October 2008, he is a Professor of Computer Science at the School of Electronic and Computer Engineering of the Technical University of Crete, and the Director of the Software Technology and Network Applications Laboratory (SoftNet). Prof. Garofalakis research focuses on Big Data analytics, spanning areas such as database systems, data streams, data synopses and approximate query processing, probabilistic databases, and data mining. His work has resulted in over 140 published scientific papers in these areas, and 36 US Patent filings (29 patents issued) for companies such as Lucent, Yahoo!, and AT&T. GoogleScholar gives over 10,000 citations to his work, and an h-index value of 55. Prof. Garofalakis is an ACM Distinguished Scientist (2011), a Senior Member of the IEEE, and a recipient of the IEEE ICDE Best Paper Award (2009), the Bell Labs Presidents Gold Award (2004), and the Bell Labs Teamwork Award (2003).