



香港中文大學
The Chinese University of Hong Kong

Institute of Theoretical Computer Science and Communications

ITCSC Colloquium

Algorithms for Data Management

By

Professor Samir Khuller

Computer Science Department, University of Maryland

~~August 5, 2009 (Wednesday)~~ August 7, 2009 (Friday)

2:30pm - 3:30pm

~~Rm. 121, Ho Sin Hang Engineering Building, CUHK~~

~~Room 1009, William M.W.Mong Engineering Bldg., CUHK~~

Abstract:

I will describe some algorithms for addressing some fundamental optimization problems that arise in the context of data storage and management. In the first part of the talk we will address the following question: How should we store data in order to effectively cope with non-uniform demand for data? How many copies of popular data objects do we need? Where should we store them for effective load balancing?

In the second part of the talk we will address the issue of moving data objects quickly, to react to changing demand patterns. We will develop approximation algorithms for these problems.

The first part of the talk is joint work with Golubchik, Khanna, Thurimella and Zhu. The second part is joint work with Kim and Wan.

Biography:

Samir Khuller received his M.S and Ph.D from Cornell University in 1989 and 1990, respectively, under the supervision of Vijay Vazirani. He spent two years as a Research Associate at the Institute for Advanced Computer Studies (UMIACS) at the University of Maryland, before joining the Computer Science Department in 1992, where he is currently a Professor in the Department of Computer Science. He spent several summers at the IBM T. J. Watson Research Center, and also visited the IBM Tokyo Research Lab for several weeks. From 2004 to 2008 he was the Associate Chair for Graduate Education.

His research interests are in graph algorithms, discrete optimization, and computational geometry. He has published about 150 journal and conference papers, and several book chapters on these topics. He is an editor for the journal Networks, International Journal on Foundations of Computer Science, problems Editor for ACM Trans. on Algorithms, and a columnist for SIGACT News. He has served on several program committees.

He received the National Science Foundation's Career Development Award, several Dept. Teaching Awards, the Dean's Teaching Excellence Award and also a CTE-Lilly Teaching Fellowship. In 2003, he and his students were awarded the "Best newcomer paper" award for the ACM PODS Conference. He received the University of Maryland's Distinguished Scholar Teacher Award in 2007, as well as a Google Research Award. He graduated at the top of the Computer Science Class from IIT-Kanpur.

*** ALL ARE WELCOME ***

Host & Enquiries : Institute of Theoretical Computer Science and Communications Tel: 2696 1257