

Winter School 2010

The Chinese University of Hong Kong

January 24-30, 2010

Room 1009, 10/F., William M.W. Mong Engineering Bldg., CUHK

Data Stream Algorithms

By

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Abstract:

A data stream algorithm is an algorithm that makes only one pass over the input data while using a small amount of memory. Such algorithms are needed in many applications in databases and networking where the data is provided as a "stream" and it is impossible to store the entire data set in memory. As a result, data stream algorithms have been extensively studied in the past decade both theoretically and in practice. This talk will present data stream algorithms for some interesting and basic problems.

Biography:

Ke Yi received his B.E. from Tsinghua University and Ph.D. from Duke University, in 2001 and 2006 respectively, both in computer science. After spending one year at AT&T Labs as a researcher, he has been an Assistant Professor in the Department of Computer Science and Engineering at Hong Kong University of Science and Technology since 2007. His research interests include algorithms, data structures, and databases.