

APPLIED MATHEMATICS COLLOQUIUM

Date: Wednesday, April 13, 2016

Time: 2:30 – 3:30 p.m.

Location: Middlesex College Room 204

On the Similarity Metric and the Distance Metric

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Abstract: Similarity and dissimilarity measures are widely used in many research areas and applications. When a dissimilarity measure is used, it is normally required to be a distance metric. However, when a similarity measure is used, there is usually no formal requirement. In this talk, we will present the following results. We first present a formal definition of similarity metric. We then show the relationship between similarity metric and distance metric. Finally, we present general solutions to normalize a given similarity metric or distance metric.

Dr. K. Zhang received the M.S. degree in mathematics from Peking University, Beijing, China, in 1981, and the M.S. and Ph.D. degrees in computer science from the Courant Institute of Mathematical Sciences, New York University, New York, USA, in 1986 and 1989, respectively. He is currently a professor in the Department of Computer Science, University of Western Ontario, London, Ontario, Canada. His research interests include Bioinformatics, Algorithms, image processing and databases.

