THE CHINESE UNIVERSITY OF HONG KONG
Institute of Network Coding
and
Department of Information Engineering
Seminar

INC

Normal Factor Graphs

by

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Date : **8 May 2014 (Thursday)**
Time : **2:30 - 3:30 pm**
Venue : **Room 833, Ho Sin Hang Engineering Building**
The Chinese University of Hong Kong

Abstract

Normal factor graphs (NFGs) are graphical representations of sums of products. This talk is aimed toward presenting NFGs as an intuitive route to some topics involving such sums of products. I will discuss simple tools that allow transformations of NFGs, then make a quick revisit to the duality theorem for codes on graphs and to holographic algorithms.

Further, I will introduce NFGs as a probabilistic model and point out their connection to some existing models.

Finally, I will conclude with the possible use of NFGs in facilitating stochastic approximations of the partition function for some models in statistical physics.

Biography

Ali Al-Bashabsheh obtained a PhD in electrical engineering from the University of Ottawa in 2014. His research interests include coding theory, probabilistic models, and information theory.

** All ARE WELCOME **

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