



THE UNIVERSITY OF CHICAGO

Department of Statistics

SCIENTIFIC AND STATISTICAL COMPUTING SEMINAR

DAVID GLEICH

Department of Computer Science
Purdue University

Spacey Random Walks and Tensor Spectral Clustering

THURSDAY, June 4, 2015 at 4:30 PM
133 Eckhart Hall, 5734 S. University Avenue

ABSTRACT

I will present recent work on a new type of stochastic process called a spacey random walk. This walk is a hybrid walk between a first-order and higher-order Markov chain and is an instance of a vertex-reinforced random walk. Using this work allows us to derive scalable computations with some theoretical guarantees to analyze a variety of real-world multi-way datasets. In particular, we use insights from this walk to come up with a new version of spectral clustering on tensor data.

Organizers:

Lek-Heng Lim, Department of Statistics, lekheng@galton.uchicago.edu, Ridgway Scott, Departments of Computer Science and Mathematics, ridg@cs.uchicago.edu, Jonathan Weare, Department of Statistics and The James Franck Institute, weare@uchicago.edu. SSC Seminar URL: http://www.stat.uchicago.edu/seminars/SSC_seminars.shtml.

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