Making matrix factorization (more) useful

Dr. Maria Chikina

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Date: Tuesday, September 17

Time: 12:00 - 12:50 pm

Location: Room 703, Thackeray Hall

Matrix factorization features in many high dimensional data analysis problems. Typically, factorization methods are used to reduce the dimensionality of data and to visualize its structure. Factorization methods can also be viewed as models for whatever process is actually generating the data represented by the matrix. However, unlike for dimensionality reduction or visualization, success at this third goal is highly dependent on the specific factorization technique used. We will discuss a method that uses weak prior knowledge constraints to obtain interpretable matrix factorizations of biological data. Food and drinks will be provided!

Maria Chikina received her BSc degree in Mathematics and Biology from the University of Chicago and a PhD in Computational Biology from Princeton University. She has been on the faculty of Computational And Systems Biology at the University of Pittsburgh since 2013. Her group develops computational methods for large scale genomic datasets.

SPEAKER(S) FOR NEXT WEEK:

Derek Orr