



Faculty of Mathematics and Computer Science
The Weizmann Institute of Science

Distinguished Lecturer Series

Sponsored by the Arthur and Rochelle Belfer Institute of Mathematics and Computer Science
and by
the Amir Pnueli Visiting Scholar Program in Computer Science and Applied Mathematics

Prof. Ben Shneiderman

University of Maryland

Title:

Interactive Network Exploration to Derive Insights: Filtering, Clustering, Grouping, and Simplification

Abstract: The growing importance of network analysis has increased attention on interactive exploration to derive insights and support personal, business, legal, scientific, or national security decisions. Since networks are often complex and cluttered, strategies for effective filtering, clustering, grouping, and simplification are helpful in finding key nodes and links, surprising clusters, important groups, or meaningful patterns. We describe readability metrics and strategies that have been implemented in NodeXL, our free and open source network analysis tool, and show examples from our research. While filtering, clustering, and grouping have been used in many tools, we present several advances on these techniques. We also discuss our recent work on motif simplification, in which common patterns are replaced with compact and meaningful glyphs, thereby improving readability.

Lecture Hall, Room 1, Ziskind Building
Tuesday, 5 February 2013
13:30

Refreshments will be served in the lobby at 13:10