

TRENDS

in Society and Information Technology

2015-2016 Seminar Series



**BEN SHNEIDERMAN, Distinguished Professor,
Department of Computer Science, University of Maryland**

“The New ABCs of Research: Achieving Breakthrough Collaborations”

Friday, April 1, 2016

3 to 4 p.m.

6011 Donald Bren Hall

A reception will follow the talk at 4 p.m. in the 5th floor atrium.

Free and open to the public; no RSVP required.

ABSTRACT Solving the immense problems of the 21st century will require ambitious research teams that are skilled at producing practical solutions and foundational theories simultaneously – that is the ABC Principle: Applied & Basic Combined. Then these research teams can deliver high-impact outcomes by applying the SED Principle: Blend Science, Engineering and Design Thinking, which encourages use of the methods from all three disciplines. These guiding principles (ABC & SED) are meant to replace Vannevar Bush’s flawed linear model from 1945 that has misled researchers for 70+ years. These new guiding principles will enable students, faculty, business leaders, and government policy makers to accelerate discovery and innovation.

BIO Ben Shneiderman (<http://www.cs.umd.edu/~ben>) is a Distinguished University Professor in the Department of Computer Science, Founding Director (1983-2000) of the Human-Computer Interaction Laboratory (<http://www.cs.umd.edu/hcil/>), and a Member of the UM Institute for Advanced Computer Studies (UMIACS) at the University of Maryland. He is a Fellow of the AAAS, ACM, IEEE, and NAI, and a Member of the National Academy of Engineering, in recognition of his pioneering contributions to human-computer interaction and information visualization. His contributions include the direct manipulation concept, clickable highlighted web-links, touchscreen keyboards, dynamic query sliders for Spotfire, development of treemaps, novel network visualizations for NodeXL, and temporal event sequence analysis for electronic health records.

Ben is the co-author with Catherine Plaisant of *Designing the User Interface: Strategies for Effective Human-Computer Interaction* (6th ed., 2016) <http://www.awl.com/DTUI/>. With Stu Card and Jock Mackinlay, he co-authored *Readings in Information Visualization: Using Vision to Think* (1999). His book *Leonardo’s Laptop* (MIT Press) won the IEEE book award for Distinguished Literary Contribution. He co-authored, *Analyzing Social Media Networks with NodeXL* (www.codeplex.com/nodexl) (Morgan Kaufmann) with Derek Hansen and Marc Smith. Shneiderman’s latest book is *The New ABCs of Research: Achieving Breakthrough Collaborations* (Oxford, February 2016).

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