

TALK: Harnessing the Data Deluge

Speaker: Dr. Fran Berman, Director, SDSC; Professor and HPC Endowed Chair, UCSD

Date and time: Thursday 19 March 2009, 10-11am

Location: Seminar Room 135, Building 26 Clayton

TALK ABSTRACT: The Information Age has brought with it a deluge of digital data. Current estimates are that in 2006, 161 exabytes (10¹⁸ bytes) of digital data were created from cell phones, computers, iPods, DVDs, sensors, satellites, scientific instruments, and other sources. This digital information drives virtually every area of research, education, commerce, entertainment, and is the source of forward progress and innovation in every country across the globe. While today's digital data has the potential to transform our work and life, the challenge of managing it, retaining it, accessing it over the long term, and using it constitute some of the most challenging problems of our time. Solving these problems requires strategies that make sense from a technical, policy, regulatory, economic, security, and community perspective. In this talk, we focus on the opportunities presented by today's and tomorrow's deluge of data along with the challenges of creating useful information from this data accessible for the foreseeable future.

BIO Dr. Francine Berman is an international leader in Cyberinfrastructure and an advocate for sustainable data preservation. She is an ACM Fellow, Professor, and first holder of the High Performance Computing Endowed Chair at U.C. San Diego. Since 2001, Dr. Berman has served as Director of the San Diego Supercomputer Center (SDSC) where she leads a staff of more than 250 interdisciplinary scientists, engineers, and technologists in the innovation, development, and provision of computational and information infrastructure. Dr. Berman is one of the two founding Principle Investigators of the National Science Foundation's TeraGrid project (providing national Grid infrastructure), and also directed the National Partnership for Advanced Computational Infrastructure (NPACI), a consortium of 41 research groups, institutions, and university partners with the goal of building national infrastructure to support research and education in science and engineering.

Dr. Berman has served on a broad spectrum of national science advisory boards including NSF's Engineering Advisory Committee, NIH's NIGMS Advisory Council, the National Academies Board of Research Data and Information, the California Council for Science and Technology, and others. She is currently co-chairing an international Blue Ribbon Task Force on Sustainable Digital Preservation and Access with economist Brian Lavoie. For her accomplishments, leadership, and vision, Dr. Berman was recognized in 2004 as one of the top women in technology by BusinessWeek, as one of the top technologists by IEEE Spectrum, and most recently as a leader in science and technology by Newsweek.

Dr Berman's web site: <http://www.sdsc.edu/about/Director.html>

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