

Conference 7243

Monday-Tuesday 19-20 January 2009 • Proceedings of SPIE Vol. 7243

Visualization and Data Analysis 2009

Conference Chairs: **Katy Börner**, Indiana Univ.; **Jinah Park**, Information and Communications Univ. (South Korea)

Conference Co-Chairs: **Matti T. Gröhn**, Ctr. for Scientific Computing (Finland); **Ming C. Hao**, Hewlett-Packard Labs.; **Jonathan C. Roberts**, Bangor Univ. (United Kingdom); **Pak Chung Wong**, Pacific Northwest National Lab.

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Monday 19 January

Welcome **Mon. 9:00 to 9:30 am**

Invited Presentation **Mon. 9:30 to 10:00 am**

Invited Presentation I (*Invited Paper, Presentation Only*), , [7243-01]

SESSION 1 **Mon. 10:30 am to 12:00 pm**

Visualizing Mind and Body: Bioinformatic Applications

Analytix for massive heat maps, Shawn J. Bohn, Deborah Payne, Grant Nakamura, Douglass Love, Pacific Northwest National Lab. (United States) [7243-02]

Asymmetry analysis based on genetic algorithms for the prediction of foot ulcers, Yi Chen, Univ. of North Dakota (United States) [7243-03]

Computer assisted analysis of microscopy images (*Short Paper*), Monica S. Sawicki, Paida Munhutu, John S. DaPonte, C. Caragianis-Broadbridge, Southern Connecticut State Univ. (United States); Ann Lehman, Trinity College (United States); Thomas J. Sadowski, E. Garcia, C. Heyden, L. Mirabelle, P. Benjamin, Southern Connecticut State Univ. (United States) [7243-04]

Visualizing conserved gene location across microbe genomes (*Short Paper*), Christopher D. Shaw, Simon Fraser Univ. Surrey (Canada) [7243-05]

Lunch Break 12:00 to 2:00 pm

SESSION 2 **Mon. 2:00 to 5:30 pm**

Visualizing Internal and External Spaces: Geographic, Semantic, Scientific

Teaching children the structure of science, Katy Börner, Indiana Univ. (United States); Stephen M. Uzzo, The New York Hall of Science (United States); Fileve Palmer, Julie M. Davis, Elisha F. Hardy, Bryan J. Hook, Indiana Univ. (United States) [7243-06]

An adaptive spread spectrum (SS) synchronous data hiding strategy for scalable 3D terrain visualization, Khizar Hayat, William Puech, Lab. d'Informatique de Robotique et de Microelectronique de Montpellier (France); Gilles Gesquière, Univ. of Marseille (France) [7243-07]

Visual data exploration of temporal graph data (*Short Paper*), Michael Farrugia, Aaron J. Quigley, Univ. College Dublin (Ireland) [7243-08]

Musician Map: visualizing music collaborations over time, Ji-Dong Yim, Chris Shaw, Simon Fraser Univ. Surrey (Canada); Lyn Bartram, Simon Fraser Univ Surrey (Canada) [7243-09]

Visual analytics of anomaly detection in large data streams, Ming C. Hao, Umeshwar Dayal, Hewlett-Packard Labs. (United States); Daniel A. Keim, Univ. of Konstanz (Germany) [7243-10]

Understanding outside collaborations of the Chinese Academy of Sciences using Jensen-Shannon Divergence, Russell J. Duhon, Indiana Univ. (United States) [7243-11]

3D scans of as-built urban scenes in a city scale, Naai-Jung Shih, Ching-Feng Chang, National Taiwan Univ. of Science and Technology (Taiwan) ... [7243-12]

Conference Dinner **Mon. 6:00 pm**

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Tuesday 20 January

Awards and Plenary Presentations . **Tues. 8:15 to 9:15 am**

Award Announcements **8:15 to 8:30 am**

Plenary Presentation **8:30 to 9:15 am**

Neptune's Garden: Exploring the Secrets of the Deep Undersea

David G. Gallo, Woods Hole Oceanographic Institute

Invited Presentation **Tues. 9:30 to 10:00 am**

Invited Presentation II (*Invited Paper*), , [7243-13]

SESSION 3 **Tues. 10:30 am to 12:00 pm**

Visualizing to Explicate: Organization, Information Resources, Scientific Discovery I

A graphical environment for interactive four-dimensional data navigation (*Short Paper*), Daniel R. Wilding, Robert P. Burton, Brigham Young Univ. (United States) [7243-14]

BrainFrame: a knowledge visualization system for the neurosciences (*Short Paper*), Steven J. Barnes, Christopher D. Shaw, Simon Fraser Univ. (Canada) [7243-15]

A main path domain map as digital library interface, Jeffrey Demaine, National Research Council Canada (Canada) [7243-16]

A unified toolkit for information and scientific visualization, Brian Wylie, Sandia National Labs. (United States); Jeffrey Baumes, Kitware, Inc. (United States) [7243-17]

Lunch/Exhibition Break 12:00 to 2:00 pm

SESSION 4 **Tues. 2:00 to 5:15 pm**

Visualizing to Explicate: Organization, Information Resources, Scientific Discovery II

PathView: an information visualization tool (*Short Paper*), Pooja Gupta, Michael J. Boyles, Scott Long, Indiana Univ. (United States) [7243-18]

Progressive refinement: more than a means to overcome limited bandwidth, René U. Rosenbaum, Sr., Heidrun Schumann, Univ. Rostock (Germany)[7243-19]

Visually comparing multiple partitions of data with applications to clustering (*Short Paper*), Jianping Zhou, Georges G. Grinstein, Univ. of Massachusetts, Lowell (United States) [7243-20]

Uncertainty visualization in the VisIt visualization environment, Andrew Foulks, R. Daniel Bergeron, Univ. of New Hampshire (United States) .. [7243-21]

Reservoir Model Information System: REMIS, Sang Yun Lee, Kwangwoo Lee, Taehyun Rhee, Ulrich Neumann, Univ. of Southern California (United States) [7243-22]

Multiresolution data aggregation for analytical exploration of large relational data, Mustafa Sanver, NYIT Abu Dhabi (United Arab Emirates); Li Yang, Western Michigan Univ. (United States) [7243-23]

Closing Remarks **Tues. 5:15 to 5:30 pm**