



**Tom Sawyer**  
SOFTWARE



# IEEE PacificVis 2013

## 6th Pacific Visualization Symposium

(<http://www.cs.usyd.edu.au/~visual/pvis2013/>)  
February 26<sup>th</sup> – March 1<sup>st</sup>, 2013, Sydney, Australia



Tuesday, 26 February, 2013 (Ballroom 2)

09:00 –	Registration
09:30 – 12:00	Tutorial Program
	Graph Drawing <i>Karsten Klein (University of Sydney)</i> <i>Michael Newton (NewtonGreen Technologies)</i>
10:30 – 11:00	Coffee Break (Ballroom 1)
12:00 – 13:30	Lunch (Sphere Restaurant)
13:30 – 15:00	PacificVAST I Chair: Seok-Hee Hong
13:30 – 13:50	Scalability in Visual Analytics <i>Thomas Ertl (University of Stuttgart)</i>
13:50 – 14:10	Condensed Views for Long-Duration Visualization Provenance <i>Issei Fujishiro (Keio University)</i>
14:10 – 14:30	Creating Functional Interactive Maps Through Smart Aggregation <i>Xiaoru Yuan (Peking University)</i>
14:30 – 14:50	Unlocking the Complexity of Genomic and Biological Data <i>Quang Vinh Nguyen (University of Western Sydney)</i>
15:00 – 15:20	Coffee Break (Ballroom 1)
15:20 – 17:00	PacificVAST II Chair: Peter Eades
15:20 – 15:40	Visual Analytics for Massive Complex Networks <i>Seok-Hee Hong (University of Sydney)</i>
15:40 – 16:00	Analytics and applications using multiple category graph visualization <i>Takayuki Itoh (Ozhanomizu University)</i>
16:00 – 16:20	Visualizing Biological Data for Research and for Outreach <i>Seán O'Donoghue (CSIRO)</i>
16:20 – 16:40	Towards Personal Visual Analytics <i>Sheelagh Carpendale (University of Calgary)</i>
16:40 – 17:00	Using Divide-and-Recombine in Visual Analytics: a case study on user behavior calling records classification <i>Wei Chen (Zhejiang University)</i>
18:00 – 19:00	Reception (Square Bar)

Wednesday, 27 February, 2013 (Ballroom 2&3)

08:30 –	Registration
08:45 – 09:00	Open Session
09:00 – 10:00	Keynote Speech I Chair: Seok-Hee Hong
	Graph Animation <i>Giuseppe Di Battista (Università Roma Tre)</i>
10:00 – 10:20	Coffee Break (Ballroom 1)
10:20 – 11:40	Session 1, Text and Map Visualization Chair: Peter Eades
10:20 – 10:40	Circular-Arc Cartograms <i>J. -H. Kaemper, S. Kobourov, and M. Noellenburg</i>
10:40 – 11:00	Exploring Entities in Text with Descriptive Non-photorealistic Rendering <i>M. -W. Chang and C. Collins</i>
11:00 – 11:20	Constrained Optimization for Disoccluding Geographic Landmarks in 3D Urban Maps <i>D. Hirono, H. -Y. Wu, M. Arikawa, and S. Takahashi</i>
11:20 – 11:40	Improved Grid Map Layout by Point Set Matching <i>D. Eppstein, M. V. Kreveld, B. Speckmann, and F. Staals</i>

11:40 – 12:00	Poster Fast Forward Chair: Quang Vinh Nguyen and Shigeo Takahasi
12:00 – 13:40	Lunch (Sphere Restaurant)
13:40 – 15:00	Session 2, Big Data Visualization Chair: Tim Dwyer
13:40 – 14:00	Reordering Massive Sequence Views: Enabling Temporal and Structural Analysis of Dynamic Networks <i>S. v. d. Elzen, D. Holten, J. Blaas, and J. J. v. Wijk</i>
14:00 – 14:20	Smooth Bundling of Large Streaming and Sequence Graphs <i>C. Hurter, O. Ersoy, and A. Telea</i>
14:20 – 14:40	GraphCharter: Combining Browsing with Query to Explore Large Semantic Graphs <i>Y. Tu and H. -W. Shen</i>
14:40 – 15:00	Visual Summaries for Graph Collections <i>D. Koop, J. Freire, and C. Silva</i>
15:00 – 15:20	Coffee Break (Ballroom 1)
15:20 – 16:40	Session 3, Volume Rendering Chair: Hans Hagen
15:20 – 15:40	Local WYSIWYG Volume Visualization <i>H. Guo and X. Yuan</i>
15:40 – 16:00	Transfer Function Design based on User Selected Samples for Intuitive Multivariate Volume Exploration <i>L. Zhou and C. Hansen</i>
16:00 – 16:20	Evaluation of Depth of Field for Depth Perception in DVR <i>A. V. P. Grosset, M. Schott, G. -P. Bonneau, and C. Hansen</i>
16:20 – 16:40	Transformations for Volumetric Range Distribution Queries <i>S. Martin and H. -W. Shen</i>
17:00 – 19:00	Poster Session (Ballroom 3) Chair: Quang Vinh Nguyen and Shigeo Takahasi

Thursday, 28 February, 2013 (Ballroom 2&3)

08:30 –	Registration
09:00 – 10:00	Keynote Speech II Chair: Sheelagh Carpendale
	Big Data: A Scientific Visualization Perspective <i>Charles (Chuck) Hansen</i>
10:00 – 10:20	Coffee Break (Ballroom 1)
10:20 – 12:00	Session 4, Visualization in Medicine and Natural Sciences Chair: Han-Wei Shen
10:20 – 10:40	Guiding Deep Brain Stimulation Interventions by Fusing Multimodal Uncertainty Regions <i>A. Bock, N. Lang, G. Evangelista, R. Lehrke, and T. Ropinski</i>
10:40 – 11:00	Discovering and Visualizing Patterns in EEG Data <i>E. Anderson, C. Chong, G. Preston and C. Silva</i>
11:00 – 11:20	A Topologically-Enhanced Juxtaposition Tool for Hybrid Wind Tunnel <i>Y. Takeshima, I. Fujishiro, S. Takahashi, and T. Hayase</i>
11:20 – 11:40	Visualization of Piecewise Linear Interface Calculation <i>G. Karch, F. Sadlo, C. Meister, P. Rauschenberger, K. Eisenschmidt, B. Weigand, and T. Ertl</i>
11:40 – 12:00	Illustrative Visualization of Cardiac and Aortic Blood Flow from 4D MRI Data <i>S. Born, M. Markl, M. Gutberlet, and G. Scheuermann</i>
12:00 – 13:40	Lunch (Sphere Restaurant)

13:40 – 15:00	Session 5, Time-varying and Multivariate Visualization Chair: Timo Ropinski
13:40 – 14:00	iTree: Exploring Time-Varying Data using Indexable Tree <i>Y. Gu and C. Wang</i>
14:00 – 14:20	Interactive Selection of Multivariate Features in Large Spatiotemporal Data <i>J. Wang, R. Sisneros and J. Huang</i>
14:20 – 14:40	SOMMOS-Self-Organizing Maps for Multi-Objective Pareto Frontiers <i>S. Chen, D. Amid, O. Shir, D. Boaz, T. Schreck, L. Limonad, and A. Anaby-Tavor</i>
14:40 – 15:00	Joint Contour Nets: Topological Analysis of Multi-Variate Data <i>H. Carr and D. Duke</i>
15:00 – 15:40	Coffee Break (Ballroom 1)
15:40 – 17:00	Session 6, Visual Analytics Chair: Thomas Ertl
15:40 – 16:00	Visual Task Solution Strategies in Tree Diagrams <i>M. Burch, G. Andrienko, N. Andrienko, M. Hoeflerin, M. Raschke, and D. Weiskopf</i>
16:00 – 16:20	Exploring Agent-Based Simulations in Political Science Using Aggregate Temporal Graphs <i>R. J. Crouser, J. Freeman and R. Chang</i>
16:20 – 16:40	Visual Analysis of Uncertainties in Ocean Forecasts for Planning and Operation of Off-Shore Structures <i>T. Höllt, A. Magdy, G. Chen, G. Gopalakrishnan, I. Hoteit, C. D. Hansen, and M. Hadwiger</i>
16:40 – 17:00	A Visual Analytics Approach to Exploring Protein Flexibility Subspaces <i>S. Barlowe, J. Yang, D. Jacobs, D. Livesay, J. Alsakran, Y. Zhao, D. Verma and J. Mottone</i>
18:00 – 21:00	Banquet (Zilver Restaurant) Level 1, 477 Pitt St (corner of Hay St ) Haymarket

Friday, 1 March, 2013 (Ballroom 2)

09:00 – 10:20	Session 7, Tree and Graph Visualization Chair: Martin Nöllenburg
09:00 – 09:20	Visualizing Edge-Edge Relations in Graphs <i>C. Vehlow, J. Hasenauer, F. J. Theis, and D. Weiskopf</i>
09:20 – 09:40	On the Faithfulness of Graph Visualizations <i>Q. Nguyen, S. -H. Hong, and P. Eades</i>
09:40 – 10:00	FlexGD: A Flexible Force-directed Model for Graph Drawing <i>A. -M. Kermarrec and A. Moin</i>
10:00 – 10:20	A Generative Layout Approach for Rooted Tree Drawings <i>H. -J. Schulz, Z. Akbar and F. Maurer</i>
10:20 – 10:50	Coffee Break (Ballroom 1)
10:50 – 12:30	Session 8, Vector and Tensor Fields Visualization Chair: Hamish Carr
10:50 – 11:10	FlowGraph: A Compound Hierarchical Graph for Flow Field Exploration <i>J. Ma, C. Wang and C. -K. Shene</i>
11:10 – 11:30	Poisson-based Tools for Flow Visualization <i>J. M. Esturo, M. Schulze, C. Roessl, and H. Theisel</i>
11:30 – 11:50	Visualizing Linear Neighborhoods in Non-Linear Vector Fields <i>S. Koch, A. Wiebel, J. Kasten, and M. Hlawitschka</i>
11:50 – 12:10	Exploring Vector Fields with Distribution-based Streamline Analysis <i>K. Lu, A. Chaudhuri, T. -Y. Lee, H. -W. Shen, and P. C. Wong</i>
12:10 – 12:30	Asymmetric Tensor Field Analysis for Sketch-like Vector Field Visualization <i>C. Auer, J. Kasten, A. Kratz, E. Zhang, and I. Hotz</i>
12:30 – 13:00	Closing Session and Best Paper Award