

## Publication

### **Edited books/proceedings:**

1. S. Hong, H. Nagamochi and T. Fukunaga, Proceedings of **ISAAC 2008** (International Symposium on Algorithms and Computation), Lecture Notes in Computer Science, Springer, 2008.
2. S. Hong, T. Nishizeki and W. Quan, Proceedings of **GD 2007** (International Symposium on Graph Drawing), Lecture Notes in Computer Science, Springer 4875, 2008.
3. S. Hong and K. Ma, Proceedings of **APVIS 2007** (Asia Pacific Symposium on Visualisation), IEEE, 2007.
4. S. Hong, Proceedings of **APVIS 2005** (Asia Pacific Symposium on Information Visualisation), Vol. 45, CRPIT, 2005.
5. S. Hong, Proceedings of **AWOCA 2004** (Australasian Workshop on Combinatorial Algorithms), 2004.

### **Guest Editorial (journal):**

1. S. Hong, Guest editor, **JGAA** (Journal of Graph Algorithms and Applications), 12(3), 2008.
2. S. Hong and H-C. Yen, Guest editor, **IJFCS** (International Journal of Foundations of Computer Science), Special issue on Graph Drawing, 17(5), 2006.

### **Book Chapters**

1. P. Eades, C. Gutwenger, S. Hong and P. Mutzel, "Graph Drawing Algorithms", Chapter 9 of the *Handbook on Algorithms and Theory of Computation* (Ed. M. Attallah), CRC Press, to appear.
2. P. Eades and S. Hong, "Chapter 5: Detection and Display of Symmetries", *Handbook of Graph Drawing and Visualisation*, R. Tamassia (editor), CRC Press, to appear.
3. P. Eades, S. Hong, K. Nesbitt and M. Takatsuka, "Visualization", Chapter 20 of *Handbook of Innovative Computing*, A. Zomaya et al. (editor), Springer Verlag, pp. 633-655, 2005.
4. P. Eades and S. Hong, "Chapter 46: Drawing Graphs", *Handbook of Data Structures and Applications*, D. Mehta and S. Sahni (editors), 46:1-22, CRC Press, 2004.

### **Journal Article**

1. S. Hong and H. Nagamochi, "Approximation Algorithms for Crossing Minimisation in Radial Layouts", to appear ***Algorithmica***.
2. S. Hong and H. Nagamochi, "Linear time algorithm for Symmetric Convex Drawings of Planar Graphs", to appear ***Algorithmica***.
3. S. Hong and H. Nagamochi, "New Approximation to the Radial Crossing Minimisation", to appear ***Journal of Graph Algorithms and Applications***.
4. W. Huang, S. Hong and P. Eades, "Measuring Effectiveness of Graph Visualizations: A Cognitive Load Perspective", to appear, ***Information Visualisation***.
5. X. Shen, A. Vande Moere, P. Eades and S. Hong, "Issues for the Evaluation of Ambient Displays", ***IJACI*** (International Journal of Ambient Computing and Intelligence), Vol 1, Issue 2, 2009.
6. D. Fung, S. Hong, D. Koschützki, F. Schreiber and K. Xu, "2.5D Visualisation of Overlapping Biological Networks", ***Journal of Integrative Bioinformatics***, 5(1), 2008.
7. S. Hong and H. Nagamochi, "Convex Drawings of Graphs with Non-convex Boundary Constraints", ***Discrete Applied Mathematics***, 156(12), 2368-2380, Elsevier, 2008.

8. C. Buchheim and S. Hong, "Testing Planarity of Symmetries in Linear Time", *Algorithmica*, 52(4), 448-465, Springer, 2008.
9. S. Hong, N. Nikolov, and A. Tarassov, "A 2.5D Hierarchical Drawing of Directed Graphs", *Journal of Graph Algorithms and Applications*, Vol. 11, no. 2, pp. 371-396, 2007.
10. W. Huang S. Hong and P. Eades, "Effects of Sociogram Drawing Conventions and Edge Crossings in Social Network Visualization", *Journal of Graph Algorithms and Applications*, Vol. 11, no. 2, pp. 397-429, 2007.
11. D. Abelson, S. Hong and D. E. Taylor, "Geometric Automorphism Groups of Graphs", *Discrete Applied Mathematics*, 155(17), pp. 2211-2226, 2007, Elsevier.
12. S. Hong, B. McKay and P. Eades, "A Linear Time Algorithm for Constructing Maximally Symmetric Straight-line Drawings of Triconnected Planar Graphs", *Discrete and Computational Geometry*, 36 (2), pp. 283-311, 2006, Springer.
13. S. Hong, D. Merrick and H. Nascimento, "The Metro Map Layout Problem", *Journal of Visual Language and Computing*, 17(3), pp. 203-224, 2006, Elsevier.
14. S. Hong and P. Eades, "Drawing Planar Graphs Symmetrically III: Oneconnected Graphs", *Algorithmica*, 44 (1), pp. 67-100, 2006, Springer.
15. S. Hong and P. Eades, "Drawing Planar Graphs Symmetrically II: Biconnected Graphs", *Algorithmica*, 42(2), pp. 159-197, 2005, Springer.
16. C. Buchheim and S. Hong, "Crossing Minimization for Symmetries", *Theory of Computing Systems*, 38 (3), pp. 293-311, 2005 (*Invited paper from ISAAC 2002*), Springer.
17. S. Hong, P. Eades and J. Hillman, "Linkless Symmetric Drawings of Series Parallel Digraphs", *Computational Geometry: Theory and Applications*, 29(3), pp. 191-222, 2004, Elsevier.
18. S. Hong and P. Eades, "Drawing Trees Symmetrically in Three Dimensions", *Algorithmica*, 36(2), pp. 153-178, 2003, Springer.
19. S. Hong, P. Eades and S. Lee, "Drawing Series Parallel Digraphs Symmetrically", *Computational Geometry: Theory and Applications*, Vol. 17, pp. 165-188, 2000, Elsevier.
20. Y. Lee, S. Hong and S. Lee, "Symmetry Analysis on Interconnection Networks and its Drawing System", *Journal of Korea Information Science Society (A)*, Vol 26, No. 11, 1999.
21. S. Hong and S. Lee, "An Algorithm for Detecting Geometric Symmetry in a Planar Graph", *Journal of Korea Information Science Society (A)*, Vol 26, No. 1, 1999.
22. H. Park, S. Hong and S. Lee, "Algorithms for Detecting the Geometric Symmetry of a Series-Parallel Digraph and its Drawing", *Journal of Korea Information Science and Society (A)*, Vol 25, No 5, pp. 481-491, 1998.
23. M. Cho, S. Hong, J. Lee and S. Lee, "Algorithms for Drawing 6-Planar Graphs in Triangular Grids", *Journal of Korea Information Science Society (A)*, Vol 24, No 2, 1997.
24. E. Oh, S. Hong and S. Lee, "Algorithms for Embedding Mesh of Trees into Star Graphs," *Journal of Korea Information Science Society (A)*, Vol 23, No 8, 1996.

### Submitted Journal Papers

1. C. Bachmaier, H. Buchner, M. Forster and S. Hong, "Crossing minimization in Extended Level Drawings of Graphs", revision submitted.
2. S. Hong and H. Nagamochi, "An Algorithm for Constructing Star-shaped Drawing of Planar Graphs", revision submitted.
3. L. Grilli, S. Hong, G. Liotta, H. Meijer and S. Wismath, "Matched Drawability of Graph Pairs and of Graph Triples", submitted.
4. S. Hong and H. Nagamochi, "Convex Drawings of Hierarchical Planar Graphs and Clustered Planar Graphs", submitted.

5. S. Hong and H. Nagamochi, "A Linear Time Algorithm for Constructing a Star-shaped Drawing of Planar Graphs with the Minimum Number of Concave Corners", submitted.
6. S. Hong and H. Nagamochi, "Star-shaped Drawings of Plane Graphs with a Cost Function on Concave Corners", submitted.

### Refereed International Conference papers

1. S. Hong, "MultiPlane Framework for Visualisation and Analysis of Large and Complex Networks", Proceedings of RIMS Workshop on Acceleration and Visualisation of Computation for Enumeration Problems, to appear.
2. S. Hong and H. Nagamochi, "Toward Characterisation of Vertex-Edge Graphs of Three-Dimensional Nonconvex Polyhedra", Proceedings of **JH** 2009 (Japanese-Hungarian Workshop on Discrete Mathematics and Its Applications), to appear.
3. D. Fung, S. Hong, D. Koschützki, F. Schreiber and K. Xu, "Visual Analysis of Overlapping Biological Networks", Proceedings of **IV** (Information Visualisation), IEEE, to appear.
4. W. Huang, P. Eades and S. Hong, "A Graph Reading Behaviour: Geodesic Path Tendency", Proceedings of IEEE Pacific Visualization Symposium (**PacificVis** 2009), IEEE, to appear.
5. L. Grilli, S. Hong, G. Liotta, H. Meijer and S. Wismath, "Matched Drawability of Graph Pairs and of Graph Triples", Proceedings of **WALCOM** 2009, 322-333, LNCS, Springer 2009.
6. T. Imamichi, J. Gim, Y. Arahori, S. Hong and H. Nagamochi, "Removing Overlaps in Label Layouts using a Multi-sphere Scheme", Proceedings of **Graph Drawing** 2008, 296-301, LNCS, Springer 2008.
7. S. Hong and M. Mader, "Generalizing the Shift Method for Rectangular Shaped Vertices with Visibility Constraints", Proceedings of **Graph Drawing** 2008, 278-283, LNCS, Springer 2008.
8. S. Hong and H. Nagamochi, "Star-shaped Drawing of Planar Graphs with Fixed Embedding and Concave Corner Constraints", Proceedings of **COCOON** 2008, LNCS, Springer, 405-414, 2008.
9. L. Grilli, S. Hong, A. Symvonis and C. Wormser, "Locally Delaunay Realizability of Regular Series-Parallel Graphs", Proceedings of **CGA** (International Workshop on Computational Geometry and Applications) 2008, IEEE, 461-467, 2008.
10. D. Fung, S. Hong, D. Hart, K. Xu, Visualizing the Gene Ontology-Annotated Clusters of Co-expressed Genes: A Two-Design Study, Proceedings of **IV** 2008, IEEE, 9-14, 2008.
11. S. Hong and H. Nagamochi, "Approximating Crossing Minimization in Radial Layouts", Proceedings of **LATIN** 2008 (Latin American Theoretical Informatics Symposium), LNCS 4957, pp. 461-472, 2008.
12. W. Huang, S. Hong and P. Eades, "Effects of Crossing Angles", Proceedings of IEEE Pacific Visualization Symposium (**PacificVis** 2008), IEEE, 41-46, 2008.
13. W. Huang, S. Hong and P. Eades, "A Cognitive Approach to the Evaluation of Graph Visualizations", Proceedings of **BELIV'08** workshop, ACM, 3, 2008.
14. X. Shen, A. Vande Moere, P. Eades and S. Hong, "An Evaluation of *Fisherman* in a Partial-Attention Environment, Proceedings of **BELIV'08** workshop, ACM, 10, 2008.
15. S. Hong and H. Nagamochi, "Star-shaped Drawings of Planar Graphs", Proceedings of **IWOCA** 2007 (International Workshop on Combinatorial Algorithm), 78-92, 2008.
16. S. Hong and H. Nagamochi, "Convex Drawings of Clustered Planar Graphs", Proceedings of **WAAC** 2007 (Workshop on Algorithms and Computations), 2007.

17. S. Hong and H. Nagamochi, "A Linear Time Algorithm for Symmetric Convex Drawings of Triconnected Planar Graphs", Proceedings of Kyoto **CGGT** 2007 (Kyoto International Conference on Computational Geometry and Graph Theory), 2007.
18. U. Brandes, C. Erten, J. Fowler, F. Frati, M. Geyer, C. Gutwenger, S. Hong, M. Kaufmann, S. G. Kobourov, G. Liotta, P. Mutzel, A. Symvonis, "Colored Simultaneous Geometric Embeddings", Proceedings of **COCOON** 2007 (Computing and Combinatorics), Lecture Notes in Computer Science 4598, pp. 254-263, 2007.
19. K. Xu, A. Cunningham, S. Hong and B. Thomas, "GraphScape: Integrated Multivariate Network Visualization", Proceedings of **APVIS** (Asia-Pacific Symposium on Visualisation) 2007, IEEE, pp. 33-40, 2007.
20. A. Ahmed, V. Batagelj, X. Fu, S. Hong, D. Merrick and A. Mrvar, "Visualisation and Analysis of the Internet Movie Database", Proceedings of **APVIS** (Asia-Pacific Symposium on Visualisation) 2007, IEEE, pp. 17-24, 2007.
21. X. Fu, S. Hong, N. S. Nikolov, X. Shen, Y. Wu and K. Xu, "Visualization and Analysis of Email Networks", Proceedings of **APVIS** (Asia-Pacific Symposium on Visualisation) 2007, IEEE, pp.1-8, 2007.
22. A. Ahmed and S. Hong, "Navigation Techniques for 2.5D Graph Layout", Proceedings of **APVIS** (Asia-Pacific Symposium on Visualisation) 2007, IEEE, pp. 81-84, 2007.
23. X. Shen, P. Eades, S. Hong and A. Vande Moere, "Intrusive and Non-intrusive Evaluation of Ambient Displays", Issues in the Design and Evaluation of Ambient Information Systems Workshop, Toronto, Canada, pp. 30-35, 2007
24. S. Hong, and H. Nagamochi, "Convex Drawings of Graphs with Non-convex Boundary", Proceedings of **WG** (Workshop on Graph Algorithm) 2006, pp. 113-124, Lecture Notes in Computer Science 4271, 2006.
25. S. Hong, and H. Nagamochi, "Convex Drawings of Hierarchical Plane Graphs", Proceedings of **AWOCA** (Australasian Workshop on Combinatorial Algorithm) 2006, 2006.
26. J. Ho, T. Manwaring, S. Hong, U. Roehm, D. Fung, K. Xu, T. Kraska and D. Hart, "PathBank: Web-Based Querying and Visualization of an Integrated Biological Pathway Database", Proceedings of **CGIV** (Computer Graphics, Imaging and Visualization) 2006, pp. 84-89, IEEE, 2006.
27. T. Dwyer, S. Hong, D. Koschuetzki, F. Schreiber and K. Xu, "Visual Analysis of Network Centralities", Proceedings of Asia Pacific Symposium on Information Visualisation (**APVIS** 2006), pp. 189-197, 2006.
28. W. Huang, S. Hong and P. Eades, "How People Read Sociograms: A Questionnaire Study", Proceedings of Asia Pacific Symposium on Information Visualisation (**APVIS** 2006), pp. 199-206, 2006.
29. W. Huang, S. Hong and P. Eades, "Predicting Graph Reading Performance: A Cognitive Approach", Proceedings of Asia Pacific Symposium on Information Visualisation (**APVIS** 2006), pp. 207-216, 2006.
30. S. Hong and N. Nikolov, "Hierarchical Layout of Directed Graphs in Three Dimensions", Proceedings of **Graph Drawing** 2005, pp. 251-261, Lecture Notes in Computer Science 3843, 2005.
31. J. Ho and S. Hong, "Drawing Clustered Graphs in Three Dimensions", Proceedings of **Graph Drawing** 2005, pp. 492-502, Lecture Notes in Computer Science 3843, 2005.
32. W. Huang, S. Hong and P. Eades, "Layout Effects on Sociogram Perception", Proceedings of **Graph Drawing** 2005, pp. 262-273, Lecture Notes in Computer Science 3843, 2005.
33. Ahmed, T. Dwyer, M. Forster, X. Fu, J. Ho, S.-H. Hong, D. Koschützki, C. Murray, N. S. Nikolov, R. Taib, A. Tarassov, K. Xu, "GEOMI: GEOMetry for Maximum Insight",

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34. S. Hong, "MultiPlane: a New Framework for Drawing Graphs in Three Dimensions", Proceedings of **Graph Drawing** 2005, pp. 514-515, Lecture Notes in Computer Science 3843, 2005.
  35. S. Hong, "Network Analysis and Visualisation", Proceedings of **Graph Drawing** 2005, pp. 524-527, Lecture Notes in Computer Science 3843, 2005.
  36. W. Li, W. S. Hong and P. Eades, "Navigating Software Architecture", Proceedings of IEEE Symposium on Visual Languages and Human-Centric Computing (**VL/HCC'05**), pp. 225-232, IEEE, 2005.
  37. W. Li, S. Hong and P. Eades, "A Framework for Visualising Large Graphs", Proceedings of International Conference Information Visualisation (**IV05**), pp. 528-535, IEEE, 2005.
  38. Ahmed, T. Dwyer, S. Hong, C. Murray, L. Song and Wu, "Visualisation and Analysis of Large and Complex Scale-free Networks", Proc. of **EuroVis** 2005 (EUROGRAPHICS-IEEE VGTC Symposium on Visualization), pp. 1-8, IEEE, 2005.
  39. K. Sugiyama, R. Osawa and S. Hong, "The Puzzle Generators and Symmetric Puzzle Layout", Proceedings of **APVIS** (Asia Pacific Symposium on Information Visualisation) 2005, pp. 93-102, Vol. 45, CRPIT, 2005.
  40. S. Hong and N. Nikolov, "Layered Drawings of Directed Graphs in Three Dimensions", Proceedings of **APVIS** (Asia Pacific Symposium on Information Visualisation) 2005, pp. 65-70, Vol. 45, CRPIT, 2005.
  41. S. Hong and T. Murtagh, "*Visualization of Large and Complex Networks Using PolyPlane*", Proceedings of **Graph Drawing** 2004, Lecture Notes in Computer Science 3383, pp. 471-482, Springer, 2004.
  42. S. Hong and P. Eades, "*A Linear Time Algorithm for Constructing Maximally Symmetric Straight line Drawings of Planar Graphs*", Proceedings of **Graph Drawing** 2004, Lecture Notes in Computer Science 3383, pp. 307-317, Springer, 2004.
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  44. S. Hong, D. Merrick and H. Nascimento, "The Metro Map Layout Problem", Proceedings of **Invis.au** (Australasian Symposium on Information Visualisation) 2004, CRPIT 35. Churcher, N. and Churcher, C., Eds., ACS. pp. 91-100, 2004.
  45. S. Hong and P. Eades, "Symmetric Layout of Disconnected Graphs", Algorithms and Computations, Proceedings of **ISAAC** 2003 (Algorithms and Computations), Lecture Notes in Computer Science, Springer, 2003, pp. 405-414, 2003.
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  48. S. Hong, "The Rectilinear Crossing Minimization Problem", Proceedings of **AWOCA** (Australasian Workshop on Combinatorial Algorithms) 2003, pp. 46-56, 2003.
  49. T. Murtagh and S. Hong, "3DTreeDraw: A Three Dimensional Tree Drawing System", Proceedings of **SoCG** (ACM Symposium on Computational Geometry) 2003, pp. 380-381, 2003.
  50. D. Abelson, S. Hong and D. E. Taylor, "A Group-Theoretic Method for Drawing Graphs Symmetrically", Proceedings of **Graph Drawing** 2002, Lecture Notes in Computer Science 2528, Springer, pp 86-97, 2002.

51. C. Buchheim and S. Hong, "Crossing Minimization for Symmetries", Proceedings of **ISAAC02**, (Algorithms and Computations), Lecture Notes in Computer Science 2518, pp 563-574, 2002.
52. S. Hong, B. McKay and P. Eades, "Symmetric Drawings of Triconnected Planar Graphs", Proceeding of **SODA** (ACM-SIAM conference on Discrete Algorithms) 2002, pp. 356-365, 2002.
53. S. Hong, "Drawing Graphs Symmetrically in Three Dimensions", Proceeding of **Graph Drawing** 2001, Lecture Notes in Computer Science 2265, Springer, pp. 189-204, 2002.
54. S. Hong and P. Eades, "An Algorithm for Finding Three Dimensional Symmetry in Trees", Proceedings of **Graph Drawing** 2000, Lecture Notes in Computer Science 1984, Springer, pp. 360-371, 2001.
55. S. Hong, "Visualisation of Symmetry in Graphs", Proceedings of Pan-Sydney workshop on Visualisation, **VIP**, CRPIT, vol. 2, pp. 71-72, 2000
56. S. Hong and P. Eades, "An Algorithm for Finding Three Dimensional Symmetry in Series Parallel Digraphs", Proceeding of **ISAAC** (International Symposium on Algorithms and Computations) 2000, Lecture Notes in Computer Science 1969, Springer, pp. 266-277, 2000.
57. S. Hong, P. Eades and S. Lee, "Finding Planar Geometric Automorphisms in Planar Graphs", Proceeding of **ISAAC** (International Symposium on Algorithms and Computations) 98, Lecture Notes in Computer Science 1533, Springer, pp. 277-286, 1998.
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59. S. Hong and P. Eades, "An Algorithm for Finding Three Dimensional Symmetry in Trees", Proceedings of Korea Information Science Society Spring Conference, **KISS**, 2000.
60. S. Hong and P. Eades, "How to Find Three Dimensional Symmetry in Series Parallel Digraphs", Proceedings of Korea Information Science Society Spring Conference, **KISS**, 2000.
61. Y. Lee, S. Hong and S. Lee, "Design and Implementation of Interconnection Network System", Proceedings of Korea Information Science Society Fall Conference, pp. 667-669, **KISS**, 1998.
62. H. Park, S. Hong, S. Lee and P. Eades, "Algorithms for Drawing Series-Parallel Digraphs Symmetrically", Proc. of **SoftVis** 97 Software Visualisation Workshop, Australia, 1997.
63. S. Hong and S. Lee, "The Flip Distance Problem of Triangulations," Proc. of the Japan-Korea Joint Workshop on Algorithms and Computation, **WAAC**, pp.9-15, 1997.
64. H. Park, S. Hong and S. Lee, "Algorithms for Detecting the Geometric Symmetry of a Series-Parallel Digraph and Its Drawing Algorithm", Proc. of the Japan-Korea Joint Workshop on Algorithms and Computation, **WAAC**, pp.32 - 39, 1997.
65. S. Hong and S. Lee, "The Flip Distance Problem of Triangulations", Proceedings of Korea Information Science Society Fall Conference, **KISS**, 1997.

#### **Refereed Conference Poster papers/ Conference Abstracts**

1. K. Haraguti, S. Hong and H. Nagamochi, "Visual Analysis of Hierarchical Data using 2.5D Drawing with Minimum Occlusion", IEEE Pacific Visualization Symposium 2008 (**PacificVis** 2008), March 5-7 Kyoto, Japan, 2008.
2. J. Gim, Y. Arahori, T. Imamichi, S. Hong and H. Nagamochi, "Overlap Removal in Label Layouts by a Multi-sphere Scheme", IEEE Pacific Visualization Symposium 2008 (**PacificVis** 2008), March 5-7 Kyoto, Japan, 2008.

3. Batagelj et al., Sunbelt 2008 Vizards Session, "Visualization and Analysis of WoS (Web of Science)", Proceedings of **Sunbelt** 2008, US.
4. A. Ahmed, X. Fu, S. Hong, Q. Nguyen, and K. Xu, "Visual Analysis of Dynamic Networks with Geological Clustering", poster, IEEE Symposium on Visual Analytics Science and Technology (**VAST**) 2007, October 2007, California USA.
5. X. Fu, S. Hong, P. Pattison and G. Robins, "Visualisation and Interaction of Temporal Multi-relational Networks, Proceedings of **Sunbelt** 2007, pp. 6, 2007.
6. Batagelj et al, Sunbelt 2007 Vizards Session, "Visualization and Analysis of Wiki", Proceedings of **Sunbelt** 2007, Greece.
7. K. Xu, R. Williams, X. Huang, C. Cotsapas, S. Hong, G. McCaughan, M. Gorrell, and P. Little, "Multi-scale Visualisation and Function Analysis of Gene Ontology Network for High Throughput Experiments", **Bioinformatics Australia** 2006, 2006.
8. D. Fung, S. Hong, K. Xu, and D. Hart, "Contextual Visualization of Microarray Data in Bioprocess Gene Ontology", **Bioinformatics Australia** 2006, 2006.
9. R. Williams, K. Xu, X. Huang, C. Cotsapas, S. Hong, G. McCaughan, M. Gorrell, and P. Little, "Visualisation and Analysis of Large and Complex Networks", 14th Annual International Conference On Intelligent Systems For Molecular Biology (**ISMB** 2006), 2006.
10. Batagelj et al, Sunbelt 2006 Vizards Session, "Visualization and Analysis of IMDB (Internet Movie DataBase)", Proceedings of **Sunbelt** 2006, Canada.
11. X. Fu, S. Hong, N. Nikolov, X. Shen, Y. Wu, and K. Xu, "Visualization and Analysis of Small-World Email Networks", 12th IEEE Symposium on Information Visualization (**InfoVis** 2006), 2006.
12. S. Hong and T. Murtagh, "PolyPlane: An Implementation of a New Layout Algorithm for Trees in Three Dimensions", IEEE **InfoVis** poster, 2003.
13. N. Nikolov and S. Hong, "Uniqueness Centralities", Proceedings of **Sunbelt** 2005, pp. 102, 2005.
14. T. Dwyer, X. Fu, S. Hong N. Nikolov and K. Xu, "Visualisation and Analysis of Large and Complex Networks Using GEOMI", Proceedings of **Sunbelt 2005**, pp. 92, 2005.

### Theses

1. S. Hong, "Algorithms for Maximum Symmetry Detection and Symmetric Drawings for Planar Graphs", Ph. D. Thesis, Ewha University, 1999.
2. S. Hong, "Rectilinear Shortest Path Problems in Rectilinear Polygons", M.S. Thesis, Ewha University.

**Technical Reports:** (Available from <http://www.cs.usyd.edu.au/~shhong/publication.htm/> and <http://www.cs.usyd.edu.au/~visual/valacon/> )

1. S. Hong and H. Nagamochi, "Two-page Book Embedding and Clustered Graph Planarity", TR [2009-004], Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2009.
2. S. Hong and H. Nagamochi, "Testing Planarity of Level Graphs with Intra-level Edges", TR[2009-005], Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2009.
3. K. Haraguchi, S. Hong and H. Nagamochi, "Visual Analysis of Hierarchical Data Using 2.5D Drawing with Minimum Occlusion", TR[2009-010], Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2009.

4. K. Haraguchi, S. Hong and H. Nagamochi, "Classification via Visualization of Sample-feature Bipartite Graphs", TR[2009-011], Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2009.
5. T. Imamichi, Y. Arahori, J. Gim, S. Hong and H. Nagamochi, "Removing overlaps in label layouts using multi-sphere scheme", TR 2008-06, Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2008.
6. S. Hong and H. Nagamochi, "Extending Steinitzl' Theorem to Non-convex Polyhedra", TR 2008-12, Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2008.
7. S. Hong and H. Nagamochi, "Star-shaped Drawings of Graphs with Fixed Embedding and Concave Corner Constraints", TR 2008-02, Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2008.
8. S. Hong and H. Nagamochi, "Convex Drawings with Non-convex Boundary Constraints", TR 2007-003, Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2007.
9. S. Hong and H. Nagamochi, "Convex Drawings of Hierarchical Planar Graphs and Clustered Planar Graphs", Department of Applied Mathematics and Physics, Graduate School of Informatics, University of Kyoto, Japan, 2007.
10. R. Webber and S. Hong, "Force-directed Animations for a Class of Dynamic Bipartite and Clustered Graphs", NICTA TR, 2007.
11. N. Senechal, S. Hong, and P. Eades, "Display of Sensor Networks", NICTA TR 2006.
12. Q. Nguyen and S. Hong, "Comparison of Centrality-Based Planarisation for 2.5D Graph Drawing", NICTA TR 2006.
13. A. Ahmed and S. Hong, "Navigation Techniques for 2.5D Graph Layout", TR, School of IT, University of Sydney, 2006.
14. C. Buchheim and S. Hong, "Testing Planarity of Geometric Automorphisms in Linear Time", ZAIK 2006-517, University of Cologne, Germany, 2006.
15. W. Huang, S. Hong, and P. Eades, "Layouts effects: Comparison of Sociogram Drawing Conventions", Technical report, USYD-IT-TR-575, Oct 2005.
16. S. Hong, "MultiPlane: a New Framework for Drawing Graphs in Three Dimensions", NICTA TR 2005.
17. C. Buchheim and S. Hong, "Crossing Minimisation for Symmetries", ZAIK 2005-484, University of Cologne, Germany, 2005.
18. S. Hong, B. McKay and P. Eades, "A Linear Time Algorithm for Constructing Maximally Symmetric Drawings of Triconnected Planar Graphs", TR IT-IVG-2004-01, School of IT, University of Sydney, 2004.
19. S. Hong and T. Murtagh, "PolyPlane: A New Layout Algorithm For Trees In Three Dimensions", Technical Report IT-IVG-2003-01, School of Information Technologies, The University of Sydney, 2003.
20. K. Sugiyama, S. Hong and A. Maeda, "The Puzzle Layout Problem", TR IT-IVG-2003-02, School of Information Technologies, The University of Sydney, 2003.
21. S. Hong, D. Merrick and H. Nascimento, "The Metromap Layout Problem", TR IT-IVG-2003-03, School of Information Technologies, The University of Sydney, 2003.
22. D. Abelson, S. Hong and D. Taylor, "A Group-Theoretic Method for Drawing Graphs Symmetrically", Technical Report IT-IVG-2002-01, School of Information Technologies, The University of Sydney, 2002.
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