

# Curriculum Vitae

## Stina Bridgeman

Box 1910, Department of Computer Science  
Brown University, Providence, RI 02912  
(401) 863-7664  
ssb@cs.brown.edu

## Education

Ph.D. Candidate in Computer Science, Brown University, Providence, RI.  
Completion expected Summer 2001.

Thesis Topic: “Techniques and Tools for Graph Drawing”

1999 Sc.M. in Computer Science, Brown University, Providence, RI.

1995 B.A. with Highest Honors in Computer Science, Williams College, Williamstown, MA.  
Thesis Topic: “Finding Hamiltonian Cycles in Grid Graphs Without Holes”

## Teaching

Spring 2001 Visiting Lecturer in Computer Science, CX 214 (Data Structures)  
Middlebury College, Middlebury, VT

Spring 1999 Graduate Teaching Assistant, CS 16 (Algorithms and Data Structures)  
Brown University, Providence, RI  
Wrote homeworks, exams, and their solutions; conducted homework help sessions and held office hours; delivered several lectures.

Summer 1996 Instructor, CPS1 (Theoretical Foundations of Computer Science)  
Center for Talented Youth, Lancaster, PA  
Lectured 3–4 hours per day; worked with students one-on-one; evaluated student work (written problems and programming tasks).

Summer 1995 Teaching Assistant, CPS1 (Theoretical Foundations of Computer Science)  
Center for Talented Youth, Lancaster, PA  
Worked with students one-on-one; evaluated student work.

Spring 1995 Teaching Assistant, CS 108 (Artificial Intelligence: Image and Reality)  
Williams College, Williamstown, MA  
Graded student programs; worked with students one-on-one in labs.

Fall 1994 Teaching Assistant, CS 134 (Introduction to Computer Science)  
Williams College, Williamstown, MA  
Graded student programs; worked with students one-on-one in labs.

## Consulting

Fall 2000 Digital Image Design, Inc., New York, NY  
Consulted on graph drawing for a visualization project.

## Research Interests

Graph drawing  
Information visualization  
Computational geometry  
Internet computing  
Computer science education

## Invited Talks

April 1999 Williams College, Williamstown, MA

## Awards and Honors

1995-98 NSF Graduate Fellowship

## Professional Societies

1995-2000 Associate Member, Sigma Xi

2000- Full Member, Sigma Xi

## Publications

### Journals

1. S. Bridgeman and R. Tamassia. Difference metrics for interactive orthogonal graph drawing algorithms. *Journal of Graph Algorithms and Applications*. 4(3):47–74, 2000.
2. S. Bridgeman, G. Di Battista, W. Didimo, G. Liotta, R. Tamassia, and L. Vismara. Turn-regularity and optimal area drawings of orthogonal representations. *Computational Geometry: Theory and Applications*, 16(1):53–93, 2000.
3. G. Barequet, S. Bridgeman, C. A. Duncan, M. T. Goodrich, and R. Tamassia. Geometric computing over the Internet. *IEEE Internet Computing*, 3(2):21–29, 1999.
4. S. Bridgeman, A. Garg, and R. Tamassia. A graph drawing and translation service on the WWW. *International Journal of Computational Geometry and Applications*, 9(4/5):419–446, 1999.

### Conferences

5. S. Bridgeman and R. Tamassia. A user study in similarity measures for graph drawing. In *Graph Drawing (Proceedings of GD '00)*, 2000. To appear.
6. S. Bridgeman, M. T. Goodrich, S. G. Kobourov, and R. Tamassia. PILOT: An interactive tool for learning and grading. In *Proceedings of the ACM Technical Symposium on Computer Science Education (SIGCSE)*, 2000. To appear.
7. S. Bridgeman, G. Di Battista, W. Didimo, G. Liotta, R. Tamassia, and L. Vismara. Optimal compaction of orthogonal representations. In *Graph Drawing (Proceedings of GD '99)*, volume 1731 of *Lecture Notes in Computer Science*, pages 8–26. Springer-Verlag, 1999.

8. S. Bridgeman, G. Di Battista, W. Didimo, G. Liotta, R. Tamassia, and L. Vismara. Turn-regularity and optimal drawings of orthogonal representations. In *Abstracts of the 15th European Workshop on Computational Geometry*, pages 161–164. INRIA Sophia-Antipolis, 1999.
9. S. Bridgeman, G. Di Battista, W. Didimo, G. Liotta, R. Tamassia, and L. Vismara. Optimal compaction of orthogonal representations. In *CGC Workshop on Geometric Computing*, 1998.
10. S. Bridgeman and R. Tamassia. Difference metrics for interactive orthogonal graph drawing algorithms. In *Graph Drawing (Proceedings of GD '98)*, volume 1547 of *Lecture Notes in Computer Science*, pages 57–71. Springer-Verlag, 1998.
11. S. Bridgeman, J. Fanto, A. Garg, R. Tamassia, and L. Vismara. InteractiveGiotto: An algorithm for interactive orthogonal graph drawing. In *Graph Drawing (Proceedings of GD '97)*, volume 1353 of *Lecture Notes in Computer Science*, pages 303–308. Springer-Verlag, 1997.
12. G. Barequet, S. Bridgeman, C. A. Duncan, M. T. Goodrich, and R. Tamassia. Classical computational geometry in GeomNet. In *Proceedings of the 13th Annual ACM Symposium on Computational Geometry*, pages 412–414, 1997.
13. S. Bridgeman, A. Garg, and R. Tamassia. A graph drawing and translation service on the WWW. In *Graph Drawing (Proceedings of GD '96)*, volume 1190 of *Lecture Notes in Computer Science*, pages 45–52. Springer-Verlag, 1997.