

Yuanxin Liu

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- EDUCATION
- ◇ **UNC-Chapel Hill**, Chapel Hill, NC
Ph.D. in computer science, expected 2007
M.S. in computer science, 2004
 - ◇ **Wittenberg University**, Springfield, OH.
B.A. in math and computer science, 2001, Summa Cum Laude
 - ◇ **honors** *Phi Beta Kappa* national honor society
- SELECTED PUBLICATIONS
- ◇ Viscous Paint Model for Interactive Applications, *Bill Baxter, Yuanxin Liu and Ming Lin*. Computer Animation and Virtual Worlds Journal 15: 433–442 (2004)
 - ◇ Flooding Triangulated Terrain, *Yuanxin Liu and Jack Snoeyink*, International Symposium on Spatial Data Handling: 137–148 (2004)
 - ◇ Faster Placement of Hydrogen Atoms in Protein Structures by Dynamic Programming, *Andrew Leaverfay and Yuanxin Liu*, Proceedings of the Workshop on Algorithm Engineering and Experiments: 39–48 (2004)
 - ◇ Testing Shortcuts to Maintain Simplicity in Subdivision Simplification, *Craig Falls, Yuanxin Liu, Jack Snoeyink and Diane Souvaine*. Proceedings of the 17th Canadian Conference on Computational Geometry: 35–38 (2005)
 - ◇ A Comparison of Five Implementations of 3d Delaunay Tessellation, *Yuanxin Liu and Jack Snoeyink*, Combinatorial and Computational Geometry, MSRI series: 439–458 (2005)
 - ◇ The “Far Away Point” for Delaunay Diagram Computation in \mathbb{E}^d , *Yuanxin Liu and Jack Snoeyink*, the 2nd International Symposium on Voronoi Diagrams in Science and Engineering: 236–243 (2005)
 - ◇ TESS3: a Program to Compute 3D Delaunay Tessellations for Well-distributed Points, *Yuanxin Liu and Jack Snoeyink*, the 2nd International Symposium on Voronoi Diagrams in Science and Engineering: 225–234 (2005)
 - ◇ Streaming Computation of Delaunay Triangulations, *Martin Isenburg, Yuanxin Liu, Johnathan Shewchuk and Jack Snoeyink*, SIGGRAPH’ 06
 - ◇ Sphere Based Computation of Delaunay Diagrams on Points from 4d Grids, *Yuanxin Liu and Jack Snoeyink*, the 3rd International Symposium on Voronoi Diagrams in Science and Engineering (2006)
- SKILLS
- ◇ C++, Mathematica, Matlab, perl, Java, Pascal, HTML
 - ◇ Fluent spoken/written English and Chinese
- COURSES (GRADUATE)
- ◇ algorithm analysis, parallel and distributed algorithms computational geometry, topology, enumerative combinatorics, scientific and geometric computation. advanced computer graphics, advanced operating system.
- WORK EXPERIENCE
- ◇ **Research Assistant**, UNC–Chapel Hill(September 2001 – present)
 - Research assistant for Professor Jack Snoeyink. Working on algorithm problems in GIS, protein folding, and 4d volume visualizations.

- ◇ **Internship**, PARC(previously Xerox PARC), Palo Alto, CA (Summer 2002)
 - Investigated statistical algorithms to reconstruct roads from noisy GPS data
- ◇ **Lecturer**, UNC–Chapel Hill (summer,2000)
 - Taught the class COMP4–power tools for the mind.
- ◇ **Internship**, CompuServe (summer,1999)
 - Developed visual basic programs to monitor client software performance.
- ◇ **Internship**, Wittenberg University (summer,1998)
 - Developed CGI scripts to automate faculty grant applications.
- ◇ **Tutor counselor**, Springfield, OH (Summer,1997)
 - Designed and taught a math class
 - Living with (high school) students in the role of tutor counselor