

DEPARTMENT OF COMPUTER SCIENCE • CALPOLY.
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ZOË J. WOOD

RESEARCH INTERESTS

geometric modeling, computational topology, and scientific visualization

EDUCATION

2000 – 2003 California Institute of Technology Pasadena, CA

Ph.D. Computer Science

Thesis: Computational Topology Algorithms for Discrete 2-manifolds

1997 – 2000 California Institute of Technology Pasadena, CA

M.S. Computer Science

Thesis: Semi-regular Mesh Extraction from Volumes

1994 – 1997 University of California Santa Cruz, CA

B.S. Computer Science

1988 – 1992 University of California Santa Cruz, CA

B.A. Women's Studies and American Studies

PUBLICATIONS

Semi-regular Mesh Extraction from Volumes

Zoë Wood, Mathieu Desbrun, Peter Schröder and David Breen

Proceedings of IEEE Visualization 2000

Topological Noise Removal

Igor Guskov and Zoë Wood

Proceedings of Graphics Interface 2001

Multi-chart Geometry Images

Pedro Sander, Zoë Wood, Steven Gortler, J. Snyder, H. Hoppe

Eurographics Symposium on Geometry Processing 2003

Isosurface Topology Simplification

Zoë Wood, Hugues Hoppe, Mathieu Desbrun and Peter Schröder

ACM Transactions on Graphics, April 2004

Energetically Optimal Travel across Terrain: Visualizations and a New Metric of Geographic Distance with Archaeological Applications

Brian Wood and Zoë Wood

SPIE Electronic Imaging, January 2006

AWARDS RECEIVED

Microsoft Research Fellowship 2001-2003
Calpoly Computer Science Professor of the Year 2003-2004

TEACHING

Cal Poly: CSC 471 **Introduction to Computer Graphics**, 2003 (Fall) 2004 (Winter, Spring) 2005 (Spring)

Cal Poly: CSC 476 **Real-time 3D Computer Graphics Software Systems**, 2004 (Spring)

Cal Poly: CSC 570 **Computer Graphics**, 2005 (Winter)

Cal Poly: CSC 101 **Fundamentals of Computer Science**, 2005 (Fall)

Caltech: Instructor CS 101.3 **Topics in Computer Graphics**, 2002 (Spring)

Caltech: Teaching Assistant CS 138ab **Algorithms**, 1999/00 (Fall/Winter)

SERVICE

Reviewer for ACM SIGGRAPH, IEEE Visualization, ACM TOG, Pacific Graphics, Shape Modeling International, IEEE Computer Graphics and Applications, IEEE Transactions on Visualizations and Computer Graphics

INVITED LECTURES AND COLLOQUIA

Stanford University Graphics Lunch, March 2001

Caltech CACR Seminar, April 2001

Graphics and Visualization Center Televideo Seminar, March 2001

Mills College Colloquium, October 2002

Westmont College, Colloquium, September 2005

EMPLOYMENT AND RESEARCH EXPERIENCE

9/2003 – Present California Polytechnic State University San Luis Obispo, CA
Assistant Professor

- Research interests include geometric modeling, computational topology and scientific visualization

6 – 9/2002 Microsoft Corporation Bellevue, WA

Research Intern for Microsoft Research

- Explored and implemented algorithms to represent geometric models as multi-chart geometry images

6 – 9/2001 Microsoft Corporation Bellevue, WA

Research Intern for Microsoft Research

- Explored and implemented new techniques for isosurface topology simplification

6 – 9/1998 Hewlett-Packard Research Labs Palo Alto, CA

Research Intern

- Explored and implemented a view-dependant texture mapping algorithm for the image-base modeling group

6 – 9/1997 NASA-Ames Research Center Moffett Field, CA

Research Intern

- Explored and implemented comparative visualization tools for wind tunnel data

REFERENCES

Peter Schröder
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California Institute of Technology
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