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RESEARCH INTERESTS

Numerical and geometric computing in science and engineering, including numerical methods, applied computational geometry and topology, high-performance computing, and geometric data analysis. Specialize in tracking dynamic surfaces, multi-physics coupling, computational mesh optimization, parallel numerical and geometric algorithms, and problem solving environments. Application areas include computational fluid dynamics, biomedical engineering, climate modeling, fluid-structure interactions, and geometric modeling.

EDUCATION

Ph.D.	Computer Science University of Illinois at Urbana-Champaign (UIUC). GPA: 4.0/4.0. Adviser: Prof. M. T. Heath Dissertation: <i>Data Transfer and Interface Propagation in Multicomponent Simulations</i>	2001
M.S.	Computer Science University of California at Santa Barbara (UCSB)	1997
B.S.	Computer Science Peking (Beijing) University, China	1995

RESEARCH & TEACHING POSITIONS

Associate Professor , Department of Applied Mathematics and Statistics, SUNY Stony Brook	09/2011–present
Assistant Professor , Department of Applied Mathematics and Statistics, SUNY Stony Brook	08/2007–08/2011
Visiting Assistant Professor , College of Computing, Georgia Tech	08/2005–08/2007
Research Scientist , Computational Science and Engineering, UIUC	08/2001–08/2005
Research Assistant , Computational Science and Engineering, UIUC	01/1998–08/2001
Givens Research Associate , Argonne National Laboratory	Summer 1998
Research Assistant , Department of Computer Science, UCSB	01/1997–08/1997

TEACHING EXPERIENCE

Primary Instructor,

Numerical Analysis I (Numerical Linear Algebra), Fall 2010, SUNYSB
Ordinary Differential Equations and Boundary Value Problems, Fall 2010, SUNYSB
Numerical Analysis II, Spring 2010, SUNYSB
Applied Calculus III, Spring 2010, SUNYSB
Applied Calculus III, Fall 2009, SUNYSB

Numerical Analysis II, Spring 2009, SUNYSB
 Numerical Analysis I (Numerical Linear Algebra), Fall 2009, SUNYSB
 Numerical Analysis I (Numerical Linear Algebra), Fall 2008, SUNYSB
 Special Topics in Computational Mathematics, Spring 2008, SUNYSB
 Numerical Analysis I (Numerical Linear Algebra), Fall 2007, SUNYSB
 Foundations of Modeling and Simulation, Spring 2007, Georgia Tech (co-taught with Prof. Fujimoto)
 Languages and Computation Fall 2006, Georgia Tech
 Languages and Computation, Summer 2006, Georgia Tech
 Design & Analysis of Algorithms, Spring 2006, Georgia Tech

GRANTS

PI:	NSF DMS-0809285 \$225,574, on optimal cross parameterizations of surfaces (with H. Zha)	09/2007–08/2011
PI:	Subcontract from Pacific Northwest National Laboratory \$91,814, on geometric engine for multi-scale modeling of respiratory system	10/2010–06/2012
Co-PI:	DOE \$600,000, on sharp interface tracking in rotating microflows of solvent extraction (PI: J. Glimm)	05/2009 - 04/2013
Co-PI:	DoD Army Research Office \$339,780, on mixing, combustion, and other interface dominated flows (PI: J. Glimm)	07/2009 - 06/2012
Co-PI:	DOE \$479,000, on two-way integration of WRF and CCSM for regional climate simulations (PI: W. Lin)	06/2010 - 06/2012
Co-PI:	DoD-Army Research Office \$200,000, Parallel Computation of Free Surface Problems Using Front Tracking Library (PI: J. Glimm)	2010
PI:	Subcontract from Pacific Northwest National Laboratory \$16,024, on mesh generation and shape analysis for biomedical computing	09/2008–12/2008
PI:	Subcontract from University of Illinois \$190,000, on correlating dynamic non-matching interfaces	01/2006–05/2007
Co-PI:	NSF/DARPA Grant 0310446 \$400K, co-PI with Profs. J. Hart, M. Heath, and J. Sullivan under NSF/DARPA CARGO program (Computational and Algorithmic Representations of Geometric Objects). on Lagrangian surface propagation	05/2003–07/2006

AWARDS

Research:	David J. Kuck Outstanding Ph.D. Thesis Award, Computer Science, UIUC	2001
Teaching:	Outstanding Teacher, Stony Brook University Excellent Teaching Assistant Award, Computer Science, UIUC	Fall 2010, Fall 2011 1997

JOURNAL PUBLICATIONS AND BOOK CHAPTERS

1. X. Jiao and D. Wang, Reconstructing High-Order Surfaces for Meshing, *Engineering with Computers*, to appear, 2011. DOI: 10.1007/s00366-011-0244-8
2. X. Li, J. Glimm, X. Jiao, C. Peyser, Y. Zhao, Study of crystal growth and solute precipitation through front tracking method, *Acta Mathematica Scientia*, Vol 30(2B), pp. 377-390, 2010.

3. R. Jaiman, P. Geubelle, X. Jiao, and E. Loth, Combined Interface Boundary Condition Method for Unsteady Fluid-Structure Interaction, *Computer Methods in Applied Mechanics and Engineering*. To appear, 2010.
4. X. Jiao, D. R. Einstein, and V. Dyedov, Local Orthogonal Cutting Method for Computing Medial Curves and Its Biomedical Applications *SIAM J. Sci. Comput.* Vol 32(2), pp. 947–969, 2010. DOI: 10.1137/090767170.
5. J. P. Pereira, C. A. Duarte, and X. Jiao, Three-dimensional crack growth with hp -generalized finite element and face offsetting methods, *Computational Mechanics*, 2010. DOI: 10.1007/s00466-010-0491-3.
6. X. Jiao, D. Wang, and H. Zha, Simple and Effective Variational Optimization of Surface and Volume Triangulations, *Engineering with Computers*, 2010. DOI: 10.1007/s00366-010-0180-z. Also in *Proceedings of 17th International Meshing Roundtable*, pp, 315–332, Pittsburgh, PA, October 2008.
7. D. R. Einstein, F. del Pin, X. Jiao, A. P. Kuprat, J. P. Carson, K. S. Kunzelman, R. P. Cochran, J. M. Guccione and M. B. Ratcliffe. Fluid-Structure Interactions of the Mitral Valve and Left Heart: Comprehensive Strategies, Past, Present and Future. *Communications in Numerical Methods in Engineering*. Vol 26(3), pp. 348-380, 2010. DOI: 10.1002/cnm.1280.
8. T. Wischgoll, D. R. Einstein, A. P. Kuprat, J. P. Carson, X. Jiao, Geometry reconstruction and grid generation, in book *Computational Cardiovascular Mechanics: Modeling and Applications in Heart Failure*. 2010. DOI: 10.1007/978-1-4419-0730-1_7.
9. D. Wang, B. L. Clark and X. Jiao. An Analysis and Comparison of Parameterization-Based Computation of Differential Quantities for Discrete Surfaces, *Computer Aided Geometric Design*. Vol 26(5), pp. 510-527, 2009. DOI: 10.1016/j.cagd.2009.02.006.
10. V. Dyedov, D. R. Einstein, X. Jiao, A. P. Kuprat, J. P. Carson and F. del Pin, Variational Generation of Prismatic Boundary-Layer Meshes for Biomedical Computing, *International Journal for Numerical Methods in Engineering*. Vol 79(8), pp. 907–945, 2009. DOI 10.1002/nme.2583.
11. X. Jiao, D. R. Einstein, V. Dyedov and J. P. Carson, Automatic Identification and Truncation of Boundary Outlets in Complex Imaging-Derived Biomedical Geometries, *Medical & Biological Engineering & Computing*, Vol 47(9), pp. 989-999, 2009. DOI 10.1007/s11517-009-0501-9.
12. J. P. Pereira, C. A. Duarte, X. Jiao and D. Guoy. Generalized Finite Element Method Enrichment Functions for Curved Singularities in 3D Fracture Mechanics Problems. *Computational Mechanics*, Vol 44(1), pp. 73–92, 2009. DOI: DOI: 10.1007/s00466-008-0356-1.
13. J. P. Pereira, C. A. Duarte, D. Guoy, and X. Jiao, Hp-Generalized FEM and crack surface representation for non-planar 3-D cracks, *International Journal for Numerical Methods in Engineering*, Vol 77(5), pp. 601-633, 2009. DOI: 10.1002/nme.2419.
14. X. Jiao, A. Colombi, X. Ni and J. Hart, Anisotropic Mesh Adaptation for Evolving Triangulated Surfaces. *Engineering with Computers*, 2009. DOI: 10.1007/s00366-009-0170-1. Also in *Proceedings of 15th International Meshing Roundtable*, pp. 173-190, Birmingham, AL, September 2006.
15. X. Jiao and N.R. Bayyana, Identification of C^1 and C^2 Discontinuities for Surface Meshes in CAD, *Computer-Aided Design*, Vol 40, pages 160–174, 2008. DOI: doi:10.1016/j.cad.2007.10.005.
16. B. Kim, Y. Liu, I. Llamas, X. Jiao, and J. Rossignac, Simulation of Bubbles in Foam with the Volume Control Method, *ACM Transactions on Graphics*, Vol 26(3), 2007. DOI: 10.1145/1276377.1276500.
17. X. Jiao, Face Offsetting: A Unified Framework for Explicit Moving Interfaces. *Journal of Computational Physics*, Vol 220(2), pages 612–625, 2007. DOI: doi:10.1016/j.jcp.2006.05.021.
18. R. K. Jaiman, X. Jiao, P. H. Geubelle, and E. Loth. Conservative load transfer along curved fluid-solid interface with non-matching meshes. *Journal of Computational Physics*, Vol 218(1), pages 372-397, 2006.

19. X. Jiao, G. Zheng, P.A. Alexander, M.T. Campbell, O.S. Lawlor, J. Norris, A. Haselbacher and M.T. Heath, A System Integration Framework for Coupled Multiphysics Simulations, *Engineering with Computers*, Vol. 22(3-4), pp. 293-309. 2006.
20. R. K. Jaiman, X. Jiao, P. H. Geubelle and E. Loth. Assessment of Conservative Load Transfer for Fluid-Solid Interface with Nonmatching Meshes. *International Journal for Numerical Methods in Engineering*. Vol 64(15), pages 2014–2038. 2005.
21. X. Jiao and M. T. Heath. Common-Refinement Based Data Transfer Between Nonmatching Meshes in Multiphysics Simulations. *International Journal for Numerical Methods in Engineering*. Vol 61(14), pages 2402–2427. 2004.
22. X. Jiao and M. T. Heath. Overlaying Surface Meshes, Part I: Algorithms. *International Journal on Computational Geometry and Applications*. Vol 14(6), pages 379–402. 2004.
23. X. Jiao and M. T. Heath. Overlaying Surface Meshes, Part II: Topology Preservation and Feature Matching. *International Journal on Computational Geometry and Applications*. Vol 14(6), pages 403–419. 2004.
24. K. Shen, T. Yang and X. Jiao. S⁺: Efficient 2D Sparse LU Factorization on Parallel Machines. *SIAM Journal on Matrix Analysis and Applications*. Vol 22(1), pages 282–305. 2000.
25. C. Fu, X. Jiao and T. Yang. Efficient Sparse LU Factorization with Partial Pivoting on Distributed Memory Architectures. *IEEE Transaction on Parallel and Distributed Systems*. Vol 9(2), pages 109–125. 1998.

REFEREED/INVITED CONFERENCE PAPERS

1. X. Jiao and D. Wang, Reconstructing High-Order Surfaces for Meshing, *International Meshing Roundtable*, Chattanooga, TN, October 2010.
2. X. Jiao and H. Zha, Consistent Computation of First- and Second-Order Differential Quantities for Surface Meshes, In *ACM Solid and Physical Modeling Symposium*, June 2008. DOI: 10.1145/1364901.1364924.
3. A. Jain and X. Jiao, Overlaying Surface Meshes: Extension and Parallelization. In *Proceedings of 16th International Meshing Roundtable*, Seattle, WA, October 2007.
4. D. Guoy, T. Wilmarth, X. Jiao, et al., Parallel Mesh Adaptation for Highly Evolving Geometries with Application to Solid Propellant Rockets, In *Proceedings of 16th International Meshing Roundtable*, Seattle, WA, October 2007.
5. J.-C. Huang, X. Jiao, R. M. Fujimoto, and H. Zha, DAG-Guided Parallel Asynchronous Variational Integrators with Super-Elements, In *Summer Computer Simulation Conference*, San Diego, CA, July 2007.
6. X. Jiao, N.R. Bayyana, and H. Zha, Optimizing Surface Triangulation via Near Isometry with Reference Meshes. In Y. Shi et al. (Eds.) *Computational Science – ICCS 2007, Part I, LNCS 4487*, Beijing, May 2007.
7. X. Jiao, Volume and Feature Preservation in Surface Mesh Optimization. In *Proceedings of 15th International Meshing Roundtable*, Birmingham AL, September 2006.
8. T. J. Alumbaugh and X. Jiao, Compact Array-based Mesh Data Structures. In *Proceedings of 14th International Meshing Roundtable*, San Diego, CA, September 2005.
9. S. Mitra, R. Sinha, M. Winslett, and X. Jiao, An Efficient, Non-intrusive Log-based I/O Mechanism for Scientific Simulations on Clusters, In *IEEE International Conference on Cluster Computing (Cluster 2005)*, Boston, MA, September 2005.
10. X. Jiao and P. J. Alexander, Parallel Feature-Preserving Mesh Smoothing. In *International Conference on Computational Science and Applications*, Singapore, May 2005.

11. M. T. Heath and X. Jiao, Academic Challenges in Coupling Large-Scale Multiphysics Simulations. In *International Conference on Computational Science*, Atlanta, Georgia, May 2005.
12. M. T. Heath and X. Jiao, Parallel Simulation of Multicomponent Systems. Invited paper in *Proceedings of 6th International Conference on High Performance Computing for Computational Science*, Valencia, Spain, June 2004.
13. X. Ma, M. Winslett, J. Norris, X. Jiao, and R. Fiedler, GODIVA: Lightweight Data Management for Scientific Visualization. In *Proceedings of 20th International Conference on Data Engineering (ICDE 2004)*, pages 732–744, Boston, MA, March 2004.
14. M. T. Heath and X. Jiao, Parallel Computational Methods in Multicomponent Systems. Invited paper in *Proceedings of 11th SIAM Conference on Parallel Processing for Scientific Computing*, San Francisco, CA, February 2004.
15. X. Jiao, M. T. Campbell and M. T. Heath, Roccom: An Object-Oriented, Data-Centric Software Integration Framework for Multiphysics Simulations. In *Proceedings of 17th Annual ACM International Conference on Supercomputing*, pages 358–368, San Francisco, CA, June 2003.
16. X. Ma, X. Jiao, M. Campbell and M. Winslett, Flexible and Efficient Parallel I/O for Large-Scale Multicomponent Simulations. In *Proceedings of 4th Workshop on Parallel and Distributed Scientific and Engineering Computing with Applications*, Nice, France, April 2003.
17. X. Jiao and M. T. Heath. Feature Detection for Surface Meshes. In *Proceedings of 8th International Conference on Numerical Grid Generation in Computational Field Simulations*, pages 705–714, Honolulu, HI, June 2002.
18. X. Jiao and M. T. Heath. Efficient and Robust Algorithms for Overlaying Surface Meshes. In *Proceedings of 10th International Meshing Roundtable*, pages 281–292, Newport Beach, CA, October 2001.
19. X. Jiao, X. Y. Li and X. Ma. SIFFEA: Scalable Integrated Framework for Finite Element Analysis. In *Proceedings of 3rd International Symposium on Computing in Object-Oriented Parallel Environments*, pages 84–95. San Francisco, CA, December 1999.
20. X. Jiao, H. Edelsbrunner and M. T. Heath. Mesh Association: Formulation and Algorithms. In *Proceedings of 8th International Meshing Roundtable*, pages 75–82, South Lake Tahoe, CA, October 1999.
21. K. Shen, X. Jiao and T. Yang. Elimination Forest Guided 2D Sparse LU Factorization. In *Proceedings of 10th Annual ACM Symposium on Parallel Algorithms and Architectures (SPAA'98)*, pages 5-15, Puerto Vallarta, Mexico, June 1998.
22. C. Fu, X. Jiao and T. Yang. A Comparison of 1-D and 2-D Data Mapping for Sparse LU Factorization on Distributed Memory Machines. In *Proceedings of 8th SIAM Conference on Parallel Processing for Scientific Computing*, Minneapolis, MN, March 1997.

INVITED PRESENTATIONS

1. X. Jiao, Some Mathematical Issues at Interfaces in Multiphysics Coupling, *DOE Multiphysics Workshop*, Park City, UT, July 2011.
2. Short Course on Differential Geometry and Matrix Methods in Geometric Analysis and Meshing, International Meshing Roundtable, Chattanooga TN, October 2010.
3. Interface Tracking Using Face Offsetting, Anisotropic Adaptation, and Beyond, University of Illinois, October 2009.
4. Common refinement and conservative data transfer, Idaho National Lab., July 2009.
5. Interface Tracking Using Face Offsetting and Anisotropic Adaptation, Los Alamos National Lab., April 2009.

6. Dynamic Interfaces in Parallel Numerical Simulations, Penn State University, March 2007.
7. A Unified Framework for Explicit Moving Interfaces, Oak Ridge National Laboratory, March 2006.
8. A Unified Framework for Explicit Moving Interfaces, University of Alabama at Birmingham, February 2006.
9. Face-Offsetting Method for Dynamic Moving Interfaces, Stony Brook University, May 2005.
10. Dynamic Interfaces in Multicomponent Simulations, Mississippi State University, April 2005.

OTHER CONFERENCE PAPERS AND PRESENTATIONS

1. N. Ray, D. Wang, X. Jiao, and J. Glimm, High-order Computation of Surface Integrals over Discrete Surfaces, *7th International Congress on Industrial and Applied Mathematics - ICIAM 2011*, Vancouver, BC, Canada, July 2011.
2. X. Jiao, D. R. Einstein, A. P. Kuprat, V. Dyedov, and N. Ray, Variational Generation of Hybrid Prism-Tetrahedral Meshes for Biomedical Applications, *2nd International Conference on Computational and Mathematical Biomedical Engineering (CMBE11)*, Washington DC, March 2011.
3. V. Dyedov, D. R. Einstein and X. Jiao, Robust Medial Curve Computation for Biomedical Geometries, *2nd International Conference on Computational and Mathematical Biomedical Engineering (CMBE11)*, Washington DC, March 2011.
4. X. Jiao, D. R. Einstein, V. Dyedov, A. Kuprat, N. Ray, Generation and Optimization of Prismatic-tetrahedral Hybrid Meshes for Complex Biomedical Geometries, *SIAM Conference on Computational Science and Engineering*, Reno NV, February 2011.
5. Y. Chen, X. Jiao, W. Lin, M. Zhang and J. He, Conservative and Noise Resistant Data Remapping for Coupled Regional Climate Modeling, *SIAM Conference on Computational Science and Engineering*, Reno NV, February 2011.
6. X. Jiao, V. Dyedov, and D. R. Einstein, Local Orthogonal Cutting Method for Computing Medial Curves and Its Applications, in *16th US National Congress of Theoretical and Applied Mechanics*, State College, PA, July 2010.
7. D. R. Einstein, J. Carson, X. Jiao, and A. Kuprat, Challenges in Geometric Analysis and Processing of Biomedical Geometries, in *SIAM/ACM Joint Conference on Geometric Design and Solid & Physical Modeling*, San Francisco, CA, October 2009.
8. X. Jiao, V. Dyedov, and D. R. Einstein, Geometric Processing and Mesh Generation for Imaging-Derived Biomedical Data, in *SIAM/ACM Joint Conference on Geometric Design and Solid & Physical Modeling*, San Francisco, CA, October 2009.
9. V. Dyedov, D. Einstein, X. Jiao, A. Kuprat, and D. Wang, Variational Generation of Prismatic Boundary-Layer Meshes for Biomedical Computation, in *7th Symposium on Trends in Unstructured Mesh Generation*, Columbus, OH, July 2009.
10. R.S. Bellur Ramaswamy, E. Fried, X. Jiao, and D.A. Tortorelli, Simulating Solid-Solid Phase Transition in Shape-Memory Alloy Microstructure by Face-Offsetting Method, in *Multiscale and Functionally Graded Materials Conference*, Honolulu, Hawaii, October 2006.
11. X. Jiao. Face Offsetting Method for Entropy-Satisfying Lagrangian Interface Propagation. In *7th World Congress on Computational Mechanics*, Los Angeles, CA, July 2006.
12. C. Duarte, J. Pereira, X. Jiao, A Robust Geometry Engine for Modeling 3-D Crack Problems with the Generalized Finite-Element Method, presented at *7th World Congress on Computational Mechanics*, Los Angeles, CA, July 2006.

13. R. Jaiman, P. Geubelle, X. Jiao, E. Loth, Accuracy and stability of loosely-coupled procedure for fluid-structure interaction, presented at *7th World Congress on Computational Mechanics*, Los Angeles, CA, July 2006.
14. X. Jiao, G. Zheng, and M. T. Heath. System Integration Framework for Dynamic, Large-Scale Multiphysics Simulations. In *8th U.S. National Congress on Computational Mechanics*, Austin, TX, July 2005.
15. R. K. Jaiman, X. Jiao, P. H. Geubelle and E. Loth. Assessment of Conservative Load Transfer for Fluid-Solid Interface with Nonmatching Meshes. In *8th U.S. National Congress on Computational Mechanics*, Austin, TX, July 2005.
16. X. Jiao, A Flexible Software Framework for Coupling Large-Scale Multicomponent Systems. In *SIAM Annual Meeting*, New Orleans, LA, July 2005.
17. X. Jiao, O. S. Lawlor, J. C. Norris, P. J. Alexander, G. Zheng, M. T. Campbell, M. T. Heath and R. A. Fiedler, Advanced Technologies for System Integration of Dynamic, Large-Scale Multiphysics Simulations. In *Proceedings of 41st AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit*, Tucson, AZ, July 2005.
18. X. Jiao, Parallel Data Transfer between Nonmatching Moving Interfaces. Presented at *11th SIAM Conference on Parallel Processing for Scientific Computing*, San Francisco, CA, February 2004.
19. X. Jiao and M. T. Heath, Accurate, Conservative Data Transfer between Nonmatching Meshes in Multiphysics Simulations. Presented at *7th US National Congress on Computational Mechanics*, Albuquerque NM, July 2003.
20. X. Jiao and M. T. Heath, Common Refinement of Nonmatching Meshes for Accurate and Conservative Data Transfer. Presented at *SIAM Conference on Computational Science and Engineering*, San Diego, CA, February 2003.
21. R. Fiedler, M. Breitenfeld, X. Jiao, A. Haselbacher, P. Geubelle and D. Guoy, Simulations of Slumping Propellant and Flexing Inhibitors in Solid Rocket Motors. In *Proceedings of 38th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit*, Indianapolis, IN. July 2002.
22. R. Fiedler, X. Jiao, A. Namazifard, A. Haselbacher, F. Najjar and I. D. Parsons, Coupled Fluid-Structure 3-D Solid Rocket Motor Simulations. In *Proceedings of 37th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit*, Salt Lake City, UT. July 2001.
23. I. D. Parsons, P. Alavilli, A. Acharya, R. Fiedler, X. Jiao and A. Namazifard, Coupled Simulations of Solid Rocket Motors. In *Proceedings of 36th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit*, Huntsville, Alabama, July 2000.
24. I. D. Parsons, P. Alavilli, A. Namazifard, X. Jiao and A. Acharya, Fluid-Structure Interaction through a Non-Material Interface: Simulations of Solid Rocket Motors. Presented at *ASCE 14th Engineering Mechanics Conference (EM 2000)*, Austin, TX, May 2000.

OTHER PROFESSIONAL ACTIVITIES

- | | | |
|-----------------------------------|--|-----------------|
| Chair, | Minisymposium on Geometric Processing and Mesh Generation in Biomedical Engineering
<i>in SIAM/ACM Joint Conference on Geometric Design and Solid & Physical Modeling</i> | 10/2009 |
| Co-chair, | Minisymposium on Interfaces in Parallel Multiphysics Simulations
Coordinated session in <i>11th SIAM Conference on Parallel Processing for Scientific Computing</i> | 02/2004 |
| External committee member, | | |
| | SIAM Conference on Computational Science and Engineering (CSE 11), 2011 | |
| | International Meshing Roundtable, 2011–2012 | |
| | Member of Steering Committee of CGNS, the CFD data standard, | 12/2008–present |

Member, Association for Computing Machinery (ACM)
American Mathematical Society (AMS)
Society for Industrial and Applied Mathematics (SIAM)

Referees, SIAM Journal on Scientific Computing, Applied Mathematics Letters, International Journal for Numerical Methods in Engineering, Journal of Computational Physics, Computer Methods in Applied Mechanics and Engineering, IEEE Transaction on Parallel and Distributed Systems, IEEE Transaction on Visualization and Computer Graphics, SIGGRAPH Asia, Engineering with Computers, BIT Numerical Mathematics, Modeling and Simulations, Computer Aided Design, Computer Aided Geometric Design, International Journal of Modelling and Simulation, AIAA Journal of Propulsion and Power, International Meshing Roundtable, DOE SBIR-STTR Grant Proposals

STUDENTS

Current Ph.D. Students:

Ying Chen, Bryan Clark, Volodymyr Dyedov, Navamita Ray, Duo Wang

Past Students Advised and Co-Advised:

R. K. Jaiman (Ph.D., UIUC, co-advised with Profs. P. Geubelle and E. Loth, now at Acusim Software)

Phil J. Alexander (M.S., UIUC, now at Volition Inc.)

Tyler J. Alumbaugh (M.S., UIUC, now at Lawrence Livermore National Laboratory)

Rao Bayyana (M.S., Georgia Tech)

Ankita Jain (M.S., UIUC, now at Cisco Systems, Inc.)

Gopal Pai (M.S., Georgia Tech, with Prof. H. Park, now at Microsoft)