



## Manish Parashar, Professor I

### Years Service at Rutgers: 9 years

1997 – Assistant Professor; 2002 – Associate Professor; 2005 – Professor

### Degrees:

Ph.D. in Computer Engineering, Syracuse University, New York, 1994.

M.S. in Computer Engineering, Syracuse University, New York, 1994.

B.E. in Electronics and Telecom. Eng'g., Bombay University, India, 1988.

### Other Related Experience (teaching, industrial, etc.):

- Research Associate, University of Texas at Austin, Texas Institute for Computational and Applied Mathematics, Center for Subsurface Modeling (September 1996 – present).
- Visiting Associate, California Institute of Technology, Department of Computer Science, (September 2000 – April 2001).
- Visiting Professor, University of Chicago, Department of Astronomy and Astrophysics, and DoE ASCI/ASAP Flash Center (June 1998 – July 1998).
- Enrico Fermi Fellow/Research Associate, Argonne National Laboratory, Division of Mathematics and Computer Science (September 1996 – August 1998).
- Adjunct Assistant Professor/Research Associate/Post-doctoral Fellow, University of Texas at Austin, Department of Computer Science (September 1994 – August 1997).

### Principal Publications (last five years):

- “Decentralized Data Sharing of Tissue Microarrays for Investigative Research in Oncology,” W. Chen, C. Schmidt, M. Parashar, M. Reiss, D. Foran, *Cancer Informatics*, Libertas Academica.
- “Hybrid Runtime Management of Space-Time Heterogeneity for Dynamic SAMR Applications,” X. Li and M. Parashar, *IEEE Transactions on Parallel and Distributed Systems*, IEEE Computer Society Press.
- “Enabling Dynamic Composition and Coordination of Autonomic Applications using the Rudder Agent Framework,” Z. Li and M. Parashar, *The Knowledge Engineering Review*, Cambridge University Press.
- Seine: A Dynamic Geometry-based Shared Space Interaction Framework for Parallel Scientific Applications,” L. Zhang and M. Parashar, *Concurrency and Computation: Practice and Experience*, John Wiley and Sons, online preprint, DOI: 10.1002/cpe.1039, April 2006.
- “A Decentralized Computational Infrastructure for Grid based Parallel Asynchronous Iterative Applications,” Z. Li and M. Parashar, *Journal of Grid Computing, Special Issue on Global and Peer-to-Peer Computing*, Springer-Verlag, pp. 1 – 18, May 2006.
- “AutoMate: Enabling Autonomic Grid Applications,” M. Parashar, H. Liu, Z. Li, V. Matossian, C. Schmidt, G. Zhang and S. Hariri, *Cluster Computing: The Journal of Networks, Software Tools, and Applications, Special Issue on Autonomic Computing*, Kluwer Academic Publishers, Vol. 9, No. 2, pp. 161 – 174, 2006.
- “Conceptual and Implementation Models for the Grid,” M. Parashar and J.C. Browne, *Proceedings of the IEEE, Special Issue on Grid Computing*, IEEE Press, Vol. 93, No. 3, pp 653 – 668, March 2005.
- “Enabling Interactive and Collaborative Oil Reservoir Simulations on the Grid,” M. Parashar, R. Muralidhar, W. Lee, D. Arnold, J. Dongarra and M. Wheeler, *Concurrency and Computation: Practice and Experience*, John Wiley and Sons, Vol. 17, Issue 11, pp. 1387 – 1414, September 2005.
- Book: “Tool and Environments for Parallel and Distributed Computing,” Wiley Book Series on Parallel and Distributed Computing, S. Hariri and M. Parashar, Eds., John Wiley and Sons, ISBN 0-471-33288-7, 212 pages, February 2004.

### **Scientific and Professional Society Memberships:**

- Senior Member, Institute of Electrical and Electronics Engineers (IEEE) and IEEE Computer Society.
- Member of Executive Committee, IEEE Computer Society Technical Committee on Parallel Processing (TCPP), 2003.
- Member, Association for Computer Machinery (ACM).

### **Honors and Awards:**

- Tewkesbury Fellowship, University of Melbourne, Australia, 2006.
- Rutgers University Board of Trustees Award for Excellence in Research, 2005.
- Distinguished Speaker, IEEE Distinguished Visitors Program (DVP), 2004 – 2006.
- Distinguished Fellow, Texas Institute for Computation and Applied Mathematics, University of Texas at Austin, TX, 1999, 2000, 2001.
- CAREER Award, National Science Foundation of the United States, 2000 – 2004.
- Enrico Fermi Scholarship, Argonne National Laboratory, 1996–1997.
- Visiting Scholarship, Max Planck Institute, Potsdam, Germany, 1996, 1997, 1999.

### **Institutional Service (last five years):**

- Member, College Planning Committee, 2006 – 2009.
- Member, Rutgers Computing Coordinating Council, 2006.
- Member, ECE Department Hiring Committee, 2006 – 2007.
- Marshal, School of Engineering Commencement, 2006.
- Committee Chair, ECE Chair Nomination Committee, 2006.
- Member, Rutgers Board of Trustees Awards Committee, 2006 – present.
- Member, Advisory Committee on Appointments and Promotions, 2005 – 2006.
- Member, CAIP Executive Committee, 2005 – present.
- Committee Chair, ECE Distinguished Seminars Committee, 2004 – 2006.
- Member, ECE Tenure/Reappointment Evaluation Committee, 2004 - present.

### **Professional Service (last five years):**

Manish is the co-founder of the IEEE International Conference on Autonomic Computing (ICAC), a member of the editorial board 7 international journals including "IEEE Transactions on Parallel and Distributed Systems" (IEEE Computer Society), "Concurrency and Computation: Practice and Experience" (John Wiley & Sons), "Cluster Computing, The Journal of Networks, Software Tools and Applications" (Kluwer Academic Publishers), "Multiagent and Grid Systems" (IOS Press), and the International Journal of Grid and Utility Computing (Inderscience Publishers), and is a member of the steering committees of 8 conferences/workshops including the IEEE International Conference on Autonomic Computing (ICAC), International Conference on Grid Computing (ICGC/GridXY), IEEE International Symposium on High Performance Distributed Computing (HPDC), and IEEE International Conference on Pervasive Services (ICPS), and the SCS High Performance Computing Symposium (HPC). He is on the program committees of over 100 international conference and workshops (9 as General Chair, 10 as Program Chair/Vice Chair). He has also served as a panelist for NSF, DoE and other funding agencies, and regularly reviews technical articles for journals and conferences.

### **Professional Development Activities (last five years):**

- Presented tutorials at leading conferences in the areas of Autonomic and Grid computing.
- IEEE Distinguished Lecturer in areas of Computational Science and Autonomic and Grid Computing.
- Revised the Software Engineering courses into a comprehensive two-semester sequence that reflects the current state of technology and practice.
- Introduced a comprehensive graduate/undergraduate program in the area of "Parallel and Distributed Computing" encompassing both education and research.