## John Sanderson

Director of Research Computing, IT Adj. Asst. Professor, Physics/ECE Michigan Technological University john@mtu.edu P: (906) 487-3593

F: (906) 487-2787

### Education

- 1. PhD in Engineering Physics, 2007 Michigan Tech, Houghton, MI.
- 2. MS in Physics, 2002 Bangalore University, Bangalore, India.
- 3. BS in Physics, Mathematics and Statistics, 2000 Bangalore University, Bangalore, India.

### Research Interests

- 1. Design, development and optimization of parallel computing and visualization platforms
- 2. Development of technological tools that assist research and classroom teaching
- 3. Development of computational sciences and engineering curriculum
- 4. Interaction of biological matter with nanomaterials
- 5. Electronic structure of nanoclusters

# **Professional Appointments**

- 1. Director of Research Computing (01/2011 present) Information Technology, Michigan Tech
- 2. Adjunct Assistant Professor

Electrical and Computer Engineering, Michigan Tech (11/2013 - present) Physics, Michigan Tech (11/2011 - present)

- 3. Assistant Research Scientist (05/2009 01/2011) Physics, Michigan Tech (Advisor: Dr. Maximilian Seel)
- 4. Application Developer (02/2008 04/2009)AT&T Research and Development HQ, Middletown, NJ

John Sanderson Page 2/2

## Synergistic Activities

- 1. Michigan Tech Representative
  - (a) Coalition for Academic Scientific Computation (2015 present)
  - (b) NSF XSEDE Campus Champion program (2012 present)
  - (c) HPC Advisory Council (2011 present)
- 2. The International Conference for High Performance Computing, Networking, Storage and Analysis
  - (a) Member, Broader Engagement Committee, SC13.
  - (b) Mentor, Broader Engagement/HPC Interconnections, SC12, SC13, SC14, SC15.
- 3. Science Advisor, John Wiley and Sons, Inc. (2010 present)
- 4. Reviewer for Scientific Journals and Conferences (2009 present)
- 5. Mentor, MICUP/MI-LSAMP, Michigan Tech (Summer 2011)

### Recent Publications

- 1. Mechanical Properties Of Graphene Nanoplatelet/Carbon Fiber/Epoxy Hybrid Composites: Multiscale Modeling And Experiments
  - C. M. Hadden, D. R. Klimek-McDonald, E. J. Pineda, J. A. King, A. M. Reichanadter, I. Miskioglu, S. Gowtham, G. M. Odegard
  - Composites Science and Technology, vol. VOLUME, p. PAGE (2015)
- 2. Predicting Mechanical Response Of Crosslinked Epoxy Using ReaxFF G. M. Odegard, B. D. Jensen, S. Gowtham, J. Y. Wu, J. Y. He, Z. L. Zhang American Society for Composites 29th Technical Conference/16th US-Japan Conference on Composite Materials, La Jolla, CA. (2014)
- Revision Control System (RCS) In Computational Sciences And Engineering Curriculum S. Gowtham XSEDE'14, Atlanta, GA. (2014)

### References

Available upon request