John Sanderson
Director of Research Computing, IT
Adj. Asst. Professor, Physics/ECE
Michigan Technological University

john@mtu.edu
P: (906) 487-4096
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

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, SC16
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. A Molecular Dynamic Modeling Of Cross-Linked Epoxy Resin Using Reactive Force Field: Thermo-Mechanical Properties
   O. Aluko, S. Gowtham, G. M. Odegard
   Journal of Mechanics Engineering and Automation, vol. 5, p. 655 (2016)
2. 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
   Carbon, vol. 95, p. 100 (2015)
3. Revision Control System (RCS) In Computational Sciences And Engineering Curriculum
   S. Gowtham
   XSEDE'14, Atlanta, GA. (2014)

References

Available upon request