

## **Aaditya G. Landge**

**Dept. / Major:** *University of Utah, School of Computing*



**Field of Study:** *Data Analysis and Visualization*

**Year in School:** *3rd year*

**Degree Being Pursued:** *Ph.D.*

**Date Expected:** *May 2016*

**Academic Advisor:** *Valerio Pascucci*

**Email:** *aaditya@sci.utah.edu*

**Degree(s) held:** *Bachelor of Engineering (Computer Science)*

**Field(s) of Interest:** *Large Scale Data Analysis and Visualization of Scientific Data, In-situ Data Analytics, Computational Topology*

**Planned Years in the PSAAP II Program:** *2014-2015*

**Year in the PSAAP II Program:** *1*

### **Description of Your Work/Project Within PSAAP II:**

*Large scale parallel data analysis/ in-situ topological analysis of combustion simulations*

### **NNSA Laboratory Visit Information:**

*I'll be spending this summer working with Dr. Peer-Timo Bremer at Lawrence Livermore National Labs on designing and developing data analysis algorithms/techniques for understanding large-scale simulation data sets. More specifically, I'll be working on in-situ topological data analysis techniques.*

### **Selected Publications:**

- 1. A. G. Landge, V. Pascucci, A. Gyulassy, J. C. Bennett, H. Kolla, J. Chen, and P.-T. Bremer. In-situ feature extraction of large scale combustion simulations using distributed segmented merge trees. In Proceedings of the ACM/IEEE International Conference for High Performance Computing, Networking, Storage and Analysis, SC '14. IEEE Computer Society, Nov. 2014 (to appear)*

2. *A. G. Landge, J. A. Levine, K. E. Isaacs, A. Bhatele, T. Gamblin, M. Schulz, S. H. Langer, P.-T. Bremer, and V. Pascucci. Visualizing network traffic to understand the performance of massively parallel simulations. IEEE Transactions on Visualization and Computer Graphics, 2012 (InfoVis 2012). LLNL-CONF-543359*
3. *M. Gamell, I. Rodero, M. Parashar, J. C. Bennett, P.-T. Bremer, A. G. Landge, A. Gyulassy, V. Pascucci, P. McCormick, and S. Pakin. Exploring power behaviors and tradeoffs of in- situ data analytics. In Proceedings of the ACM/IEEE International Conference for High Performance Computing, Networking, Storage and Analysis, SC '13. IEEE Computer Society, Nov. 2013*
4. *Bhatele, T. Gamblin, S. H. Langer, P.-T. Bremer, E. W. Draeger, B. Hamann, K. E. Isaacs, A. G. Landge, J. A. Levine, V. Pascucci, M. Schulz, and C. H. Still. Mapping applications with collectives over sub-communicators on torus networks. In Proceedings of the ACM/IEEE International Conference for High Performance Computing, Networking, Storage and Analysis, SC '12. IEEE Computer Society, Nov. 2012. LLNL-CONF-556491*

### **Honors / Awards:**

1. *Best Poster - SCIX-2011, SCI Institute, Salt Lake City, UT*
2. *Successfully Completion of Argonne Training Program on Extreme Scale Computing (ATPESC 2013)*
3. *Runner's Up Best Project at Techfest' 09, IIT Bombay- Parallel Implementation of Machine Learning Algorithms and its use in the Development of an intuitive Human Computer Interface Using Hand Detection and Gesture Recognition*

Date Updated: *July 1, 2014*