Mark Kim

72 South Central Campus Drive, Room 3750 Salt Lake City, UT. 84112

801-414-7924 mbk-at-cs.utah.edu http://www.cs.utah.edu/~mbk January 2015

1998-2002

Education

PhD. in Computing

Advisor: Charles Hansen

University of Utah Nov. 2015

Title: GPU-Enabled Surface Visualization

B.S. in Computer Science and Philosophy

University of Wisconsin, Madison, Madison WI.

Professional Experience

Postdoctoral Researcher Scientific Computing and Imaging Institute, University of Utah

Salt Lake City, UT

Dec. 2015-Present

Research Assistant Scientific Computing and Imaging Institute, University of Utah

Salt Lake City, UT Aug. 2008 - Aug. 2014, Jan. 2015 - Nov 2015

Graduate Intern
Livermore, CA
Livermore, CA
Livermore, CA
Livermore National Lab
May 2015 - Jul 2015

Graduate Intern Los Alamos National Lab

Los Alamos, NM May 2008 - Aug. 2008, May 2009 - Aug. 2009

Publications

Kim, M. and C. Hansen. "Surface Flow Visualization using the Closest Point Embedding". In: 2015 IEEE Pacific Visualization Symposium (Apr. 2015).

Kim, M. and C. Hansen. "GPU Surface Extraction with the Closest Point Embedding". In: *Proceedings of IS&T/SPIE Visualization and Data Analysis*, 2015. Feb. 2015.

Kim, M., G. Chen, and C. Hansen. "Dynamic Particle System for Mesh Extraction on the GPU". In: *Proceedings of the 5th Annual Workshop on General Purpose Processing with Graphics Processing Units.* GPGPU-5. London, England: ACM, May 2012, pp. 38–46.

Gyulassy, A., N. Kotava, M. Kim, C. Hansen, H. Hagen, and V. Pascucci. "Direct Feature Visualization Using Morse-Smale Complexes". In: *IEEE Transactions on Visualization and Computer Graphics* 18.9 (Sept. 2012), pp. 1549–1562.

UV, Kannan, M. Kim, D. Gerszewski, J.R. Anderson, and M. Hall. "Assembling Large Mosaics of Electron Microscope Images using GPU". In: *Proceedings of the 2009 Symposium on Application Accelerators in High Performance Computing (SAAHPC'09)*. 2009.

Invited Talks

GPGPU with CUDA

Dynamic Particle System for Mesh Extraction on the GPU

Salt Lake City, UT

IAMCS-KAUST Workshop on Computational Biomedicine and Geophysics

April 5, 2012

Implicit Surfaces with a Particle System on the GPU

College Station, TX February 23, 2011

 $IAMCS\ Workshop:\ Visualization\ in\ Biomedical\ Computation$

KAUST, Saudia Arabia

Pervasively Parallel Solutions for Partial Differential Equations Workshop

May 2-5, 2010