HOME

Organization Chart
Jobs and Fellowships
Berkeley CSE
Safety and Health
CS Newsletters

NERSC

News & Publications
Image Gallery
Annual Reports

CRD COMPUTATIONAL RESEARCH DIVISION

News & Publications
Visualization Gallery

ESnet

ESnet News
Publications

CS Staff Only

New to Berkeley Lab Computing Sciences Team

January 31, 2011

Joerg Meyer, CRD Visualization Group

Joerg Meyer

As a member of CRD's Visualization Group, Joerg Meyer will develop novel visualization algorithms, use state-of-the-art visual analytics techniques and provide parallel supercomputing support, to help researchers from various disciplines understand their experimental and simulation data.

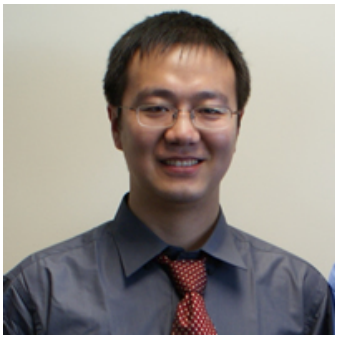
Prior to this position, Meyer was a faculty member at the University of California at Irvine where he taught computer graphics and scientific visualization, while doing high-performance computing and visualization research at the California Institute for Telecommunications and Information Technology. Before that, he implemented Virtual Reality methods for civil engineers and medical professionals at a National Science Foundation Engineering Research Center at the Mississippi State University.

"I was 10 years old when I first became interested in computing. My uncle gave me an electronics kit for Christmas, and I was able to put together my first flip-flop, a circuit made up from two transistors that can store a single bit. Later, I assembled my first computer by soldering the circuit board, which helped me to understand the underlying technology from the ground up," said Meyer. "Now I routinely work with multi-core, massively parallel supercomputers, which is definitely a step up. I'm glad Berkeley Lab is giving me an opportunity to do what I actually love."

A native of Central Germany, near Frankfurt, Meyer completed his undergraduate and doctorate education at the University of Kaiserslautern, Germany. Shortly after receiving his Ph.D., he moved to California to pursue a postdoctoral position at the Institute for Data Analysis & Visualization at the University of California at Davis.

"I had originally planned to stay in California for a short visit of three months, but after the first month I liked it so much that I decided to extend my stay, and now I'm in my twelfth year," says Meyer, who enjoys boogie boarding, swimming and pretty much anything that has to do with water and ocean.

Chaopeng Shen, HPCRD Postdoctoral Fellow



Chaopeng Shen

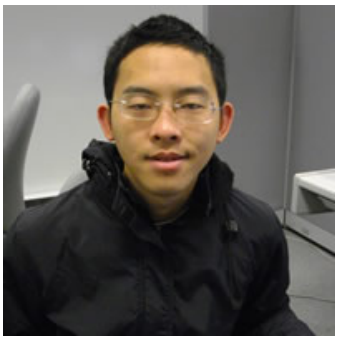
As a postdoctoral fellow in CRD's High Performance Computing Department, Chaopeng Shen will simulate micro-scale processes encountered during carbon sequestration, like subsurface flow and reactive transport, using the adaptive finite volume method.

Originally from Chengdu, China, Shen earned a doctorate in Environmental Engineering from the Michigan State University in 2009. During his graduate studies, he developed an adaptive mesh refinement package with high order accurate finite difference method for hyperbolic problems. He also developed a model to efficiently solve the physically based governing equations for the hydrologic cycle and coupled it to the Community Land Model. The combined model can be used to study the interactions between the ecosystem, the hydrologic system, and subsurface processes.

"These experiences walked me through the cycle of conceptualization, implementation, debugging, validation and interpretation, and have prepared for me for the challenges of this new position, which requires me to utilize existing computational frameworks to address exciting geophysical/geochemical problems," says Shen.

Shen's interest in computing was inspired as an undergraduate at Sichuan University in China, when he began writing code for flow and reactions in a fluidized bed. "I was amazed by the idea of illustrating complex system behavior with the help of simulations. I was totally fascinated by the ingenuity and discipline in the algorithms," he adds. In his spare time, Shen enjoys karaoking, playing soccer and poker.

WangYi Liu, NERSC Postdoctoral Fellow



WangYi (Bobby) Liu

As a new NERSC Computational Science Postdoctoral Fellow, WangYi "Bobby" Liu will be working with the ALE-AMR code to add surface tension. This work is a continuation of his graduate research and a project that he worked on as a NERSC summer student.

Originally from China, Liu completed his undergraduate degree in computational math at Peking University. He then moved to California to pursue a doctorate in mathematics at the University of California, Los Angeles. In his spare time, Liu enjoys playing board games and tabletop role-playing games.