



## Professional Affiliations

Association for Computing Machinery (ACM)  
Computer Society of the Institute for Electrical and Electronics Engineers (IEEE)  
Computer Society of the IEEE  
ACM Special Interest Group on Computer Graphics and Interactive Techniques

## Service to the Profession and Community

Paper reviewer for several conferences  
Invited participant in the NSF sponsored Workshop on International Assessment of Research and Development in Simulation-based Engineering and Science, 2008  
IEEE International Conference on Shape Modeling & Applications 2008: Volunteer Coordinator  
Workshop on Applications in Shape, Solid, & Physical Modeling 2008: Volunteer Coordinator  
International Workshop on Volume Graphics 2001, 2005  
Computer Graphics International 2005  
Point-Based Graphics 2005  
FIRST Robotics: Programming Workshops; SBPLI Long Island Regional; National Championship  
BSA: Venturing Crew 872 Advisor, Troop 343 Newsletter, Pack 328 Den Leader Coach

## Summary of Technical Qualifications

Broad range of expertise in the theory and application of distributed volume visualization  
Conducted research on Linux and Windows PC clusters  
Programming experience in C/C++ , OpenGL, Assembly, Java, Fortran, others  
Working knowledge of compilers, networks, and operating systems

## Refereed Papers

S. Frank and A. Kaufman, **Out-of-Core and Dynamic Programming for Data Distribution on a Volume Visualization Cluster**, *Computer Graphics Forum (to appear)*, 2008.  
S. Frank and A. Kaufman, **Dependency Graph Approach to Load Balancing Distributed Volume Visualization**, *The Visual Computer, International Journal of Computer Graphics*, DOI: 10.1007/s00371-008-0295-z, 2008.  
S. Frank, **Framework for Interactive Massive Volume Visualization**, *Grace Hopper Celebration of Women in Computing, PhD Forum (to appear)*, October, 2008.  
S. Frank and A. Kaufman, **Distributed Volume Rendering on a Visualization Cluster**, *CAD/Graphics*, December 2005, pages 371-376.  
S. Frank and A. Kaufman, **Dependency Graph Scheduling in a Volumetric Ray Tracing Architecture**, *SIGGRAPH/Euro. Graphics Hardware Workshop*, September 2002, pages 127-135.  
T. Yuke, S. Frank, V. Tsaoussidis, and H. Badr, **Middleware Design Issues for Application Management in Resource Networks**, *IEEE International Conference on Networks*, September 2000, pages 125-130.

## Selected Presentations

**Massive Data Management for Distributed Volume Visualization**, *Dissertation Defense*, Stony Brook, NY, USA, September 26, 2008.  
**Managing Out-of-core Volume Data in a Distributed Visualization System**, HPCCN Annual Meeting, November 8, 2007, Invited talk.  
**Stony Brook Visual Computing Cluster**, TeraRecon Booth, Society of Exploration Geophysicists Annual Meeting, Denver, Colorado, October 10-15, 2004.