

Susan L. Frank

CONTACT INFORMATION	7 Grandview Lane Smithtown, NY 11787-4231	Phone: (631) 361 - 8667 sfrank02@gmail.com
EDUCATION	Ph.D., Computer Science, Stony Brook University, December 2008 <ul style="list-style-type: none">- Dissertation topic: <i>Massive Data Management for Distributed Volume Visualization</i>- Advisor: Dr. Arie Kaufman, Distinguished Professor and Department Chair M.S. Computer Science, Stony Brook University, May 2000 GPA: 3.42 / 4.0 B.S., Computer Science and Applied Mathematics, University at Albany, May 1980	
EXPERIENCE	Farmingdale State College , Farmingdale, NY <i>Adjunct Professor</i> <ul style="list-style-type: none">- UNIX Operating Systems.	Spring 2009 – Present
	Stony Brook University , Stony Brook, NY <i>Research Assistant/Teaching Assistant</i> <ul style="list-style-type: none">- Taught Recitations for Foundations of Computer Science.- State-of-the-art research in the world-renowned Stony Brook Visualization Laboratory.- Distributed Linux network real-time volume visualization system implementation.- Created ray task encryption data structure and scheduling algorithm for ray tracing.- Designed methods for partitioning data and out-of-core data management.- Hardware procurement and project management for Stony Brook Visual Computing Cluster.- Provided integration and test support for HP Sepia hardware and MDS cluster.	1999 – 2008
	NY Institute of Technology , Old Westbury, NY <i>Adjunct Professor</i> <ul style="list-style-type: none">- Programming I and Programming II.	Spring – Fall 2005
	AIL Systems, Inc. , Deer Park, NY <i>Computer Engineer</i> <ul style="list-style-type: none">- Full life-cycle research and development of the AN/ALQ161 radar jamming system.- Participated in company training courses on radar and ECM/ECCM techniques.- Designed advanced signal recognition algorithm for detection of PRI Agile threats.- Made significant reductions in the size and complexity of the entire receiving system software as well as the DRFM and other jamming software modules.- Supervised the coding and testing of the Central Integrated Test System modules and brought this function back on schedule when it fell behind in the absence of the original designer.- Introduced embedded documentation system to create flowcharts automatically from the source code, the key selling point in convincing the Air Force to accept on-line documentation.- Directed the software effort for system hardware integration and testing.	1980–1985
HONORS AND AWARDS	<i>Invited Participant</i> Workshop on International Assessment of Research and Development in Simulation-based Engineering and Science, NSF, Washington, DC, 2008. <i>Invited Talk</i> HPCCN Annual Meeting. Reno, Nevada, 2007. <i>Finalist</i> Student Poster Competition. Supercomputing Conference, Reno, Nevada, 2007. <i>Dean's Nomination</i> AFCEA Fellowship, 2007. <i>Invited Demo</i> Stony Brook Visual Computing Cluster in the TeraRecon Booth. Society of Exploration Geophysicists Annual Meeting, Denver, Colorado, 2004. <i>Female Ph.D. Fellowship</i> CES Computer Solutions, 2000 and 2001. <i>New York State Regents Scholarship</i> .	
TECHNICAL SKILLS	Languages C++, C, Assembly, Javascript, Java, L ^A T _E X, Labview Tools/Libraries openVL, gtk, glib, subversion, MPI Operating Systems Linux, Windows, and Unix	

ACTIVITIES

IEEE (2000 – Present)
Long Island Section Secretary 2009

F.I.R.S.T. Robotics (2002 – Present)
Programming Workshops; SBPLI Long Island Regional; Hauppauge Team Mentor

Boy Scouts of America (1991 – Present)
Pack 328 Den Leader; Troop 343 volunteer; Initiated formation of Venturing Crew 872

ACM (2000 – Present)

Paper reviewer and conference volunteer for several international conferences and journals

PUBLICATIONS

S. Frank and A. Kaufman. Out-of-Core and Dynamic Programming for Data Distribution on a Volume Visualization Cluster. In *Computer Graphics Forum*, 28 (1), pp. 141-153, April 2009.

S. Frank and A. Kaufman. Dependency Graph Approach to Load Balancing Distributed Volume Visualization. In *The Visual Computer, International Journal of Computer Graphics*, 25 (4), pp. 325-337, April 2009.

S. Frank and A. Kaufman. Distributed Volume Rendering on a Visualization Cluster. In *CAD/Graphics*, pp. 371-376, December 2005.

S. Frank and A. Kaufman. Dependency Graph Scheduling in a Volumetric Ray Tracing Architecture. In *SIGGRAPH/Euro. Graphics Hardware Workshop*, pp. 127-135, September 2002.

T. Yuke, S. Frank, V. Tsaoussidis, and H. Badr. Middleware Design Issues for Application Management in Resource Networks. In *IEEE International Conference on Networks*, pp. 125-130, September 2000.