

Laxmikant V. Kalé

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Education

Ph.D., Computer Science, December 1985, SUNY at Stony Brook, NY 11794
M.E., Computer Science, July 1979, Indian Institute of Science, Bangalore, India.
B. Tech. Elect. Engr., May 1977, Banaras Hindu University, Varanasi, India

Academic Positions Held

Professor, Computer Science: August 2000—present
Associate Professor, Computer Science: August 1991—August 2000
Assistant Professor, Computer Science: August 1985—August 1991
Joint/Affiliate Faculty member, Beckman Institute, ECE and M&IE Depts.

Professional Societies and Activities (past 5 years)

Member: ACM, IEEE, IEEE Computer Society
Vice Chair (Software): IPDPS '06
Vice Chair: ICPP (Intl. Conf. on Parallel Programming) 2003
Publicity Chair and Program Committee member, JavaGrande 2002
Program Committee member, IPDPS 2001.
Program Committee member, 7'th and 8'th Int. Conf. on
High Performance Computing (HiPC'2000,2001)
Reviewer for numerous computer science conferences and journals.

Awards

Gordon Bell award (Special category), 2002 (SC2002)
Finalist, Gordon Bell award (Special category), 2000 (SC2000)

Research Interests

Scalable Parallel Programming	Irregular Parallel Problems
Re-use of parallel software	Dynamic Load Balancing
Computational Science and Engineering	Parallel Application Frameworks

Significant Projects:

Charm++: Object-based Parallel Programming System, based on processor-virtualization, with intelligent Runtime support
Adaptive MPI: MPI implementation based on processor-virtualization
Faucets: Efficient resource allocation across the computational grid, and within clusters
Parallel Adaptive Frameworks for CSE including FEM, structured multiblock and AMR
BioPhysics: Parallel Molecular Dynamics and collaborative molecular modeling.
Extensive collaborative Projects with Scientists and Engineers across a variety of fields (including Quantum Mechanical Modeling, Molecular Dynamics, Rocket Simulation, Computational cosmology, Material Structures, and Space-time meshing).
Software tools produced in all the above projects distributed via internet.

Graduate Students

Past Master's students (14)	Current Master's students (10)
Past Ph.D. students (7)	Current Ph.D. students (7)