

SRIKANTH SASTRY

Computer Science and Artificial Intelligence Laboratory, MIT, Cambridge, MA

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Education

- **Ph.D. in Computer Engineering** from Texas A&M University, College Station, TX
 - Advisors: Scott M. Pike and Jennifer L. Welch
 - August 2004 – February 2011
 - Dissertation title: *A Prescription For Partial Synchrony*
- **B.Tech. in Computer Science** from National Institute of Technology, Calicut, India
 - August 1997 – June 2001

Research Interests

Distributed Computing, Fault Tolerance, Wireless Systems, Formal Modeling, Computability and Complexity Theory.

Conference Publications

- [1] Mohsen Ghaffari, Nancy Lynch, and Srikanth Sastry, *Leader Election using Loneliness Detection*, In: Proceedings of the 25th International Symposium on Distributed Computing (DISC), 2011. Acceptance Rate: 22.8%
- [2] Srikanth Sastry, Tsvetomira Radeva, Jianer Chen, and Jennifer Welch, *Reliable Networks with Unreliable Sensors*, In: Proceedings of the 12th International Conference on Distributed Computing and Networking (ICDCN), pp. 281–292, 2011. Acceptance Rate: 22.1%
- [3] Scott M. Pike, Srikanth Sastry, and Jennifer L. Welch, *Failure Detectors Encapsulate Fairness*, In: Proceedings of the 14th International Conference on Principles of Distributed Systems (OPODIS), pp. 173–188, 2010. Acceptance Rate: 26.2%
- [4] Scott M. Pike, Srikanth Sastry, and Jennifer L. Welch, *Brief Announcement: Failure Detectors Encapsulate Fairness*, In: Proceedings of the 24th International Symposium on Distributed Computing (DISC), pp. 389–391, 2010
- [5] Srikanth Sastry, Scott M. Pike, and Jennifer L. Welch, *Crash-Quiescent Failure Detection*, In: Proceedings of the 23rd International Symposium on Distributed Computing (DISC), pp. 326–340, 2009. Acceptance Rate: 28.4%
- [6] Srikanth Sastry, Scott M. Pike, and Jennifer L. Welch, *The Weakest Failure Detector for Wait-free Dining Under Eventual Weak Exclusion*, In: Proceedings of the 21st ACM Symposium on Parallelism in Algorithms and Architectures (SPAA), pp. 111–120, 2009. Acceptance Rate: 32.5%
- [7] Srikanth Sastry, Scott M. Pike, and Jennifer L. Welch, *Crash Fault Detection in Celerating Environments*, In: Proceedings of the 23th IEEE International Parallel & Distributed Processing Symposium (IPDPS), 12 pages, 2009. Acceptance Rate: 23.0%. Awarded **Best Paper**

- [8] Scott M. Pike, Yantao Song, and Srikanth Sastry, *Wait-Free Dining Under Eventual Weak Exclusion*, In: Proceedings of the 9th International Conference on Distributed Computing and Networking (ICDCN), pp. 135–146, 2008. Acceptance Rate: 16.2%
- [9] Srikanth Sastry and Scott M. Pike, *Eventually Perfect Failure Detectors using ADD Channels*, In: Proceedings of the 5th International Symposium on Parallel and Distributed Processing and Applications (ISPA), pp. 483–496, 2007. Acceptance Rate: 34.0%

Manuscripts Under Review

- [1] Scott M. Pike, Srikanth Sastry, and Jennifer L. Welch, *Failure Detectors Encapsulate Fairness*, Journal: Distributed Computing
- [2] Srikanth Sastry, Tsvetomira Radeva, Jianer Chen, and Jennifer Welch, *Reliable Networks with Unreliable Sensors*, Journal: Pervasive and Mobile Computing

Unrefereed Publications

- [1] Mohsen Ghaffari, Nancy Lynch, and Srikanth Sastry, *Leader Election Using Loneliness Detection (Extended Version)*, Technical Report No. MIT-CSAIL-TR-2011-045, Massachusetts Institute of Technology

Teaching Experience

- **TA for Operating Systems** for Dr. Ricardo Bettati during Spring 2010
 - Graded and advised students on assignments and tests.
 - Prepared programming projects and advised students on these projects.
- **TA for Distributed Algorithms and Systems** for Dr. Jennifer Welch during Fall 2009
 - Assisted in teaching the graduate level course.
 - Graded assignments and advised students on assignments, tests, and course material.
- **TA for Introduction to Computing** for Dr. Valerie Taylor during Fall 2009
 - Assisted in grading assignments and final projects.

Research/Professional Experience

- **Postdoctoral Associate, 2011-present** at CSAIL, MIT, Cambridge, MA
 - **Wireless Systems** - Investigating the theoretical foundations of wireless and mobile computing.
 - **Formal Models** - Formal modeling of failure detectors within the I/O Automata framework.
- **Research Assistant, 2004-2011** at Texas A&M University, College Station, TX
 - **Distributed Computing** - Worked on detection and isolation of failures, and self stabilization in various models of distributed systems.
 - **Grid Networks and Security** - Represented TAMU in Grid computing efforts, and network security audit and analysis at a consortium of 28 research institutions.

- **Software Engineer, 2001-2004** at Cisco Systems, Bangalore, India
 - **Network Software Development** - Developed test plans, automated testing, executed integration tests for subscriber access control features on Cisco routers.
 - **Router Configuration Analysis** - Developed tools for diagnosis of router configurations related to subscriber access control.
 - **CLI Testing** - Automated the testing of command line interface on Cisco routers.
 - **Training** - Trained over 20 Cisco technical assistance engineers on configuration, operation, and maintenance of subscriber access control routers.

Referee Service

External reviewer for Distributed Computing Journal, SIAM Journal on Computing, Information Process Letters, Symposium on Distributed Computing (2010, 2011), Symposium on Stabilization, Safety, and Security of Distributed Systems (2009, 2010), International Conference on Distributed Computing Systems (2009, 2010), International Conference On Principles Of Distributed Systems (2011).

Academic and Professional Distinctions

- Best Paper Award, IEEE International Parallel & Distributed Processing Symposium, 2009
- Best Poster Award, Industry Affiliates Program, Dept. of Computer Science, TAMU, 2008
- Graduate Leadership Award, Computer Science, 2007
- Merit Scholarships, TAMU, 2004–2005, 2005–2006, 2008–2009, 2009–2010
- Patent Award, Cisco Systems, 2003
- Customer Satisfaction Award, Cisco Systems, 2004

Volunteer Service and Distinctions

- **Volunteer Service**
 - Co-Founder, Generic Indian Kid (GIK) Non-Profit
 - Radio Operator, KEOS 89.1FM Community Radio, College Station/Bryan, 2007–2010
 - Volunteer, StageCenter Community Theater, Bryan, 2007–2009
 - Board Member, Brazos Progressives, 2007–2008
 - Math Tutor, Jane Long Middle School, Bryan ISD, 2006–2008
 - President, International Graduate Student Association, TAMU, 2005–2006
 - Panelist, Voice of Aggieland: A panel discussion on diversity at Texas A&M, 2005
 - Member, Texas A&M Diversity Action Plan Committee, 2005
- **Awards**
 - Eppright Outstanding Student Award, International Programs Office, TAMU, 2008
 - Graduate Leadership Award, Dept. of Computer Science, TAMU, 2007
 - Buck Weirus Spirit Award, Association of Former Students, TAMU, 2006
 - Award for Excellence in Team Work, International Programs Office, TAMU, 2006

Hobbies and Interests

Photography, Bicycling, Tennis, Hiking.

Affiliations

- Member, Upsilon Pi Epsilon, Computer Science Honor Society
- Member, Pinnacle Honor Society
- Member, ACM

Work Authorization

- Eligible for practical training in the U.S.A.