

Curriculum Vitae for Sosale Shankara Sastry

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Dean and Roy W. Carlson Professor of Engineering
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Education

B.Tech. (1977), Indian Institute of Technology, Bombay, India.
M.S. EECS (1979), University of California, Berkeley.
M.A. Mathematics (1980), University of California, Berkeley.
Ph.D. EECS (1981), University of California, Berkeley.

Experience in Higher Education

- Dean Of Engineering, 2007-present
- Director, Richard C. Blum Center for Developing Economies, 2007- present.
- Professor of Mechanical Engineering, 2007- present.
- Director and PI of NSF Science and Technology Center “TRUST: Team for Research in Ubiquitous Security Technologies”, 2005-present.
- Director (CITRIS), 2005- 2007
- Nippon Electronics Corporation (NEC) Distinguished Professorship in the College of Engineering and the Walter A. Haas School of Business, 2002- present.
- Chairman, Department of Electrical Engineering and Computer Sciences, U. C. Berkeley, 2001-2004.
- Professor of Bioengineering, 1999- present.
- Director, Electronics Research Laboratory, U. C. Berkeley, 1996-1999.
- Professore A Contratto, Universita di Pisa, Summer 1995, Summer 1998.
- Gordon McKay Professor of EECS (tenured appointment), Harvard University, 1994.
- Visiting Vinton Hayes Professor of EECS, MIT, Fall 1992.
- Professore A Contratto, Universita di Roma. "La Sapienza", Summer 1990, Summer 1991.
- Professor, University of California, Berkeley, 1988 – present.
- Associate Professor, University of California, Berkeley, 1984 -1988.
- Visiting Fellow, Australian National University, Canberra, Australia, Summer 1985.
- Assistant Professor, University of California, Berkeley, 1983 - 1984.
- Assistant Professor, Massachusetts Institute of Technology, Cambridge, 1980 - 1982.

Experience in Government

- Nominated as Member 2008, Naval Research Advisory Council, NRAC (not accepted)
- Member, 2008-09, Defense Sciences Board (DSB),
- Member, President's Council on Science and Technology--Technical Advisory Group (PCAST-TAG) on Networking and Information Technology (OSTP nomination) 2006- 2007.
- Member, AFRL Commander's Command and Control Software Windtunnel Study, 2004-2006.
- Member, DoD TARA Review Board for Information Technology, 2004-2006.
- Member, DIA-NRC Panel on Emerging Threats and Technologies, from September 2004- present.
- Member DARPA Information Sciences and Technology Study Group, 2003-2006.
- Member, Air Force Science Advisory Board AF-SAB (Sec AF nomination with Presidential concurrence), October 2002-2006.
- Director, Information Technology Office, DARPA, (DARPA director nomination. with Sec Def. concurrence) Nov. 1999-Feb 2001.

Professional Experience

- Consultant to United Technologies, Boeing, Lockheed Martin, Finmeccanica, Ford, GM (India Labs), Honeywell. Past consulting includes IBM, HP, GE, Intuitive Surgical, Guidant, Telecom Italia, and numerous venture firms including KPCB, USVP, APAX, etc.
- Directeur Recherche, Poste Rouge, Centre Nationale Recherche Scientifique (CNRS), Toulouse, France, Summer 1991.
- Graduate Student Aide, Honeywell Systems and Control Inc., Minneapolis, 1978.
- Research Engineer, Bharat Electronics, Bangalore, India, Summer 1976.
- Research Engineer, Indian Telephone Industries, Bangalore, India, Summer 1975.

Board Memberships

- Scientific Advisory Board to Finmeccanica, SPROUT, 2007-2011.
- Scientific Advisory Board to Scientific Systems Inc. 2006-2007.
- Member, Scientific Advisory Board for Singapore National Research Foundation, 2009-2012.
- Member, Science and Technology Advisory Board for the Thai Prime Minister 2009-2012.
- Member, Board of Visitors, ECE Departments, CMU and Cornell, 2006-2008.
- Board of Trustees, International Computer Science Institute, Berkeley, October 2003-09, Chairman of the Board, 2004-09.
- Member, Army Research Laboratories and Army Research Office Review Board, 2002, 2005.

- Member, Committee of Visitors, National Science Foundation, Engineering, 2003.
- NSF Engineering Directorate, ECS Division, September 2002.
- Board of Advisors, Swedish Ministry of Defense, 2002-2003.
- Board of Directors, Berkeley Intel Lablet, July 2002-July 2003.
- Board Member, Federation of American Scientists, DC, July 2002-July 2008.
- Board Member, CrossBow, Inc. Milpitas, CA 2007-2011.
- Stanford School of Engineering Advisory Board, 2007-present
- Board Member, C3 LLC, Redwood City, CA2009-present
- Scientific Advisory Board, Interwest Partners, Menlo Park, CA 2011-present
- Board Member, HCL Technologies, Inc., New Delhi, India 2012-present
- Academic Software Advisory Panel (ASAP), GE, San Ramon, CA 2011-present
- Scientific Advisory Board of UN Secretary General, 2014-present
- Scientific Advisory Board, Eriksholm Technologies, Denmark, 2014-present
- NSF Engineering Directorate Advisory Committee, 2014-present

Professional Activities

Past Associate Editor of:

- Proceedings of the IEEE
- IMA Journal of Mathematical Control and Information
- International Journal of Adaptive and Optimal Control
- Systems and Control Letters
- Journal of Mathematical Systems, Estimation and Control
- IEEE Transactions on Circuits and Systems
- IEEE Transactions on Automatic Control
- IEEE Control Magazine
- Large Scale Systems

Honors and Awards

- Chang Lin Tien Educational Leadership Award, 2010
- Ph. D. Honoris Causa, Royal Institute of Technology, Stockholm, 2007
- Ragazzini Award for distinguished career in Control education, American Control Council, 2005.
- American Academy of Arts and Sciences, 2004.
- Nippon Electronics Corporation (NEC) Distinguished Professorship in the College of Engineering and the Walter A. Haas School of Business, 2002.
- National Academy of Engineering, 2001.
- David Marr Best Paper Prize, International Conference in Computer Vision, 1999.
- Distinguished Alumnus Award, IIT Bombay, 1999.
- Fellow, IEEE, 1994.
- M.A. (Letters), honoris causa, Harvard University, 1994.
- Eckman Award of the American Control Council, 1990 for the best control engineer under the age of 35 awarded by IEEE, ASME, AIAA, AIChE, SPIE, Optical Society Of America.
- NSF Presidential Young Investigator Award, 1985.

- IBM Faculty Development Grant, 1983.
- IEEE Student Best Paper Award, 1977.
- President of India Gold Medal, 1977.

List of M.S. Students (terminal M.S., but no Ph.D.)

Name	Graduation Date	Current Location
James Krause (MIT)	1982	Honeywell, Minneapolis, MN
Lee Stone (Biophysics/EECS)	1983	NASA Ames, Ames, CA
Paul Homburger	1983	SRI, Palo Alto, CA
Mel Badgett	1984	Integrated Systems, Santa Clara, CA
Gary Demuth	1985	AFWAL, Albuquerque, NM
Curtis Elia	1986	Integrated Systems, Santa Clara, CA
Pietro Perona	1986	Caltech, Pasadena, CA
Paul Jacobs	1986	Qualcomm, San Diego, CA
Tim Hahn	1987	Bellcore, Holmdel, NJ
Shobana Venkatraman	1988	Teknekron Comm, Berkeley, CA
Christian Sallaberger	1989	University of Toronto, ON
Greg Heinzinger	1989	Qualcomm, San Diego, CA
Cesar Alvarez	1990	Microsoft, Seattle, WA
Karin Hollerbach (Bioengg)	1991	LBNL, Berkeley, CA
Shawn Wayen Hsu	2000	Unknown (but in Si Valley)
Shahid Rashid	2000	ERIDE, San Francisco, CA
Courtney Sherman Sharp	2000	Moteiv, Inc. Berkeley. CA
Nils Wemhoener (Mech E.)	2000	RWTH-AC, Aachen, Germany
Arnab Nilim (CE)	2001	Goldman Sachs, New York, NY
Mario Micheli	2001	Brown University, Providence, RI
Cedric Sek-Kong Ma	2002	Northrup Grumman, El Segundo, CA
Judy Liebman	2003	Lawrence Livermore Laboratories, CA
Adonis Antoniadis	2003	NICTA, Sydney, Australia
Jessica Pannequin	2007	NASA Ames, Mountain View, CA

List of Doctoral Students
If not in EECS, major is explicitly noted

Name	Graduation Date	Current Location
Jean Jacques Slotine (Aero)	1983	ME, M. I. T., Cambridge, MA
Ramon Silva	1984	Teknekron Comm → assorted companies in Venezuela
Stephen Boyd	1984	EE, Stanford University, Palo Alto, CA (joint with Chua and Desoer)
Brad Paden	1985	ME, UC Santa Barbara, CA
Marc Bodson	1986	ECE, CMU → ECE, University of Utah, UT
Efithimios Kappos	1986	Math, University of Thessaloniki, Greece
Li-Chen Fu	1987	EE&CS, National Taiwan University, Taiwan
Er-Wai Bai	1987	ECE, University of Iowa, Iowa City, IA
Andy Packard (ME)	1988	ME, UC Berkeley, CA
Jeff Mason (ME)	1988	IBM Rochester, MN
Ping Hsu	1988	ECE, San Jose State University, CA
Saman Behtash	1988	Assorted Start Ups
John Hauser	1989	ECE, University of Colorado, CO
Arlene Cole	1989	EE, Morgan State University, Baltimore, MD
Zexiang Li	1989	EE, Hong Kong Univ. of Sci and Tech, Hong Kong
Niklas Nordstrom	1990	EE, Royal Inst of Tech, Stockholm, Sweden
D.C. Deno (Bioengg)	1991	Intermedics, Houston, Texas (joint with Keller)
Richard Murray	1991	Mech E, EECS Caltech, Pasadena, CA
A. K. Pradeep (ME)	1992	Neurofocus, Berkeley, CA (sold to Nielsen),
Andrew Teel	1992	ECE, University of California, Santa Barbara
Raja Kadiyala	1992	CH2M Hill, San Francisco, CA
Kris Pister	1992	EECS, UC Berkeley, CA (joint with Fearing)
Linda Bushnell	1994	ECE, University of Washington, WA
Gregory Walsh	1994	EE, University of Maryland, MD
Dawn Tilbury	1994	ME, University of Michigan, MI
Datta Godbole	1994	Honeywell Tech Center, MN
John Lygeros	1996	EE, ETH, Zurich
Steve Burgett	1996	Yasukawa Motors, San Francisco, CA

Antonia Lindsey	1997	NASA Ames, Mountain View, CA
Charles Coleman	1997	Aero Astro, MIT. Cambridge, MA
Jeffrey Wendlandt (ME)	1997	Math Works, Worcester, MA
Lara Crawford (Biophysics)	1998	PARC, Palo Alto, CA
Claire Tomlin	1998	Aero./ EE, Stanford University and EECS University of California, Berkeley
George Pappas	1998	EE, University of Pennsylvania, Philadelphia, PA
Yi Ma	2000	ECE, Univ. of Illinois, Urbana, IL
Murat Cenk Cavusoglu	2000	EE and BioE, Case Western , Cleveland, OH
Tak Kuen John Koo	2000	ECE, University of Hong Kong, Hong Kong
Hyunchul David Shim (ME)	2000	ME, Korean Advanced Institute for Science and Technology, KAIST, Seoul, Korea.
Hyoun Jin Kim (ME)	2001	Aero, Seoul National University, Seoul, Korea
Rene Vidal	2003	Biomed, CS, Johns Hopkins University, Baltimore, MD
Jianghai Hu	2003	ECE, Purdue University, West Lafayette, IN
Omid Shakernia	2003	Northrop Grumman, Los Angeles, CA
Luca Schenato	2003	ECE, Universita di Padova, Padova, Italy
Jun Zhang	2003	EE, Jiaotong University, Shanghai, China
Xinyan Deng (ME)	2004	ME, Purdue University, West Lafayette, IN
Bruno Sinopoli	2005	ECE, Carnegie Mellon University, Pittsburgh, PA
Hoam Chung (ME)	2005	ME, Melbourne University, Australia.
Wei Chung Wu	2006	Berkeley (lost track)
Aaron Ames	2006	ECE, Texas A&M University, College Station, TX
Shawn Schaffert	2006	Moteiv, Inc., Berkeley, CA (lost track)
Songhwai Oh	2006	ECE, Seoul National University, Korea
Alessandro Abate	2007	Computer Science, University of Oxford, UK
Tanya Roosta	2008	Federal Reserve Bank, San Francisco, CA
Parvez Ahammad	2008	Howard Hughes Medical Institute Janelia Farms, Virginia
Phoebus Chen	2008	Tarana Wireless, Berkeley, CA
Edgar Lobaton	2009	EE, University of North Carolina, Chapel Hill, NC
Marci Meingast	2009	Lawrence Livermore National Labs, Livermore, CA
Todd Templeton	2009	Google, Pittsburgh, PA

Milos Drezgic	2010	University of California, Berkeley
Saurabh Amin (CEE)	2011	Civil, EECS, MIT (joint with Bayen)
Xia (Bonnie) Zhu	2011	Looking for academic position
Humberto Gonzalez	2012	Systems Engineering, Washington University (St. Louis)
Nikhil Naikal	2014	Flyby Media Inc, NYC (start up)
Sam Burden	2014	University of Washington, Seattle

List of Post Doctoral Scholars

Name	Year of Visit	Affiliation
Robyn Owens	1986	University of Western Australia
B. Zavidovique	1986	ETCA, Paris
Helene Chochon	1987	ECE Paris
A. Oliveira	1988	COPPE, Rio de Janeiro
I. Mazon	1990	LAAS, Toulouse, France
D. Luzeaux	1991	Ecole Polytechnique, U. Paris, FR.
J. Kosecka	1996-99	George Mason University, DC
C. Mason	1997	NASA Ames
S. Sekhavat	1997	INRIA-Rhone Alpes
F. Hoffmann	1997-99	University of Kiel, Germany
J. Hespanha	1998	University of California, Santa Barbara
M. Prandini	1998	Politecnico di Milano, Italy
K. Johansson	1998-2000	Royal Institute of Technology, Sweden
J. Lygeros	1998	ETH, Zurich
S. Simic (Math)	1999- 2004	San Jose State University, San Jose, CA
Ekaterina Lemch	2000	McGill University, Canada
John Takkeun Koo	2000-2003	University of Hong Kong
Murat Cavusoglu	2000-2002	Case Western University, Cleveland

Hyoun Jin Kim	2001-2004	Seoul National University, Seoul, Korea
Ian Mitchell	2002-2003	University of British Columbia, Vancouver.
Christopher Geyer	2002-2005	I-Robot, Cambridge, MA
Massimo Franceschetti	2002-2004	University of California, San Diego, CA
Jonathan Sprinkle	2003-2007	Univ of Arizona, AZ
Michael Eklund	2003-2006	Ontario Institute of Technology, Canada
Bruno Sinopoli	2005-2006	CMU, Pittsburgh, PA
Hoam Chung	2006-2009	University of Melbourne, Australia
Allen Yang	2006-present	Atheer, Inc., Mt. View, (Start up) and Research Scientist
Vincent Duindam	2006-2008	Intuitive Surgical Inc. , Palo Alto
Alvaro Cardenas	2006-2009	University of Texas, Dallas, TX
Annarita Gianni	2007-2010	Sandia National Labs
Songhwai Oh	2006-2007	Seoul National University, Korea
Galina Schwartz	2010-present	Berkeley (Research Scientist)
Dheeraj Singaraju	2010-2012	Google Research, Mountain View
Henrik Ohlsson	2011-2014	C3 Inc., Redwood City (start up)
Ehsan Elhamifar	2012-present	Berkeley

Books Published

Shankar Sastry has co-authored 4 textbooks. They are

1. “*An Invitation to 3D Vision: From Images to Models*” co-authored with Y. Ma, S. Soatto, and J. Kosecka, published by Springer Verlag in November 2003,
2. *Nonlinear Systems: Analysis, Stability and Control* published by Springer-Verlag in 1999,
3. *A Mathematical Introduction to Robotic Manipulation* (with R. Murray and Z. Li, CRC Press, 1994), and
4. *Adaptive Control: Stability, Convergence and Robustness* (with M. Bodson, Prentice Hall, 1989, now out of print but available for free download at <http://www.ece.utah.edu/~bodson/acscr/index.html>),

He has co-edited 5 other books *Hybrid Control II*, *Hybrid Control IV* and *Hybrid Control V* (with P. Antsaklis, A. Nerode, and W. Kohn, Springer Lecture Notes in Computer Science, LNCS, 1995, 1997, and 1999, respectively) and co edited *Hybrid Systems: Computation and Control* (with T. Henzinger, Springer-Verlag Lecture Notes in Computer Science, 1998) and *Essays in Mathematical Robotics* (with Baillieul and Sussmann, Springer-Verlag IMA Series), 1999.

He has two textbooks in progress “Generalized Principal Component Analysis” with R. Vidal and Yi Ma, and “Hybrid Control Systems” with J. Lygeros and C. Tomlin, both under contract with Springer Verlag. The former is due to appear in early 2015.

List of Publications

1. Wenchao Li, Dorsa Sadigh, S. Shankar Sastry, Sanjit Seshia. Synthesis of Human-in-the-Loop Systems. Tools and Algorithms for the Construction and Analysis (TACAS 2014)
2. Dorsa Sadigh, Katherine Driggs-Campbell, Alberto Puggelli, Wenchao Li, Victor Shia, Ruzena Bajcsy, Alberto Sangiovanni-Vincentelli, S. Shankar Sastry, Sanjit Seshia. Data-Driven Probabilistic Modeling and Verification of Human Driver Behavior. Formal Verification and Modeling in Human-Machine Systems - AAAI Spring Symposium 2014.
3. N. Naikal, P. Lajevardi, and S. S. Sastry. Joint Detection and Recognition of Human Actions in Wireless Surveillance Camera Networks. Robotics and Automation (ICRA), 2014 IEEE International Conference on. Robotics and Automation, 2014.
4. Elhamifar, Ehsan and Burden, S A and Sastry, S S. Adaptive piecewise--affine inverse modeling of hybrid dynamical systems. IFAC World Congress 2014, Cape Town, 24-29 Aug 2014 (to appear)
5. G. Schwartz, H. Tembine, S. Amin, and S. S. Sastry, Demand response scheme based on lottery-like rebates, Proceedings of the 19th World Congress of the International Federation of Automatic Control, (IFAC), 24 -29 August, 2014, Cape Town, South Africa, 2014.
6. S. Amin, G. A. Schwartz, A. A. Cardenas, and S. S. Sastry, Game theoretic models of electricity theft detection in smart utility networks, IEEE Control Systems Magazine, IEEE, 2014.
7. A. Gupta, G. A. Schwartz, C. Langbort, S. S. Sastry, and T. Basar, A three-stage Colonel Blotto game with applications to cyber-physical security, in ACC, Portland, OR, USA, June 4 - 6, 2014.
8. G. A. Schwartz and S. S. Sastry, Cyber-insurance framework for large scale interdependent networks, in Proceedings of the 3rd international conference on High confidence networked systems, HiCoNS '14, CPSWeek, Berlin, Germany, April 15-17, 2014, ACM, 2014, pp. 145-154.
9. P. Loiseau, G. A. Schwartz, J. Musacchio, S. Amin, and S. S. Sastry, Incentive mechanisms for internet congestion management, Networking, IEEE/ACM Transactions on Networking, Vol. 22, no. 2, pp. 647--661, 2014.
10. A. Gupta, G. A. Schwartz, C. Langbort, S. S. Sastry, and T. Basar, A Three-Stage Colonel Blotto Game: When to Provide More Information to an Adversary, In Proceedings of the fifth Conference on Decision and Game Theory for Security, Los Angeles, USA, November 2014 (to appear).
11. S. Amin, G. A. Schwartz, and S. S. Sastry, Security of interdependent and identical networked control systems, Automatica, vol. 49, n. 1, pp. 186 -- 192, 2013.
12. Chi Pang Lam, Allen Yang, Ehsan Elhamifar, Shankar Sastry, Multi-scale TILT Feature Detection with Application to Geometric Image Segmentation. ICCV 2013 Workshop on 3D Representation and Recognition, Sydney, Australia, December 2013.

13. S. Amin, X. Littrico, S. Sastry and A. Bayen, “ Cyber Security of Water SCADA Systems: Part I Analysis and Experimentation of Stealthy Deception Attacks”, IEEE Transactions on Control Systems Technology, VOL. 21. No. 5, Sept 2013, pp. 1963-1970.
14. R. Dong, L. Ratliff, H. Ohlsson, and S.S. Sastry. Energy Disaggregation via Adaptive Filtering. 51st annual Allerton Conference on Communication, Control, and Computing, 2013.
15. R. Dong, L. Ratliff, H. Ohlsson, and S.S. Sastry. A Dynamical Systems Approach to Energy Disaggregation. IEEE 52nd Annual Conference on Decision and Control (CDC), 2013.
16. Ratliff, Lillian J. and Burden, Samuel A. and S. Shankar Sastry. Characterization and Computation of Local Nash Equilibria in Continuous Games. Proceedings of the 51st Annual Allerton Conference on Communication, Control and Computing, 2013.
17. Coogan, Samuel and Ratliff, Lillian J. and Calderone, Daniel and Tomlin, Claire and Sastry, S. Shankar. Energy Management via Pricing in LQ Dynamic Games. Proceedings of the 2013 American Control Conference 2013, pages 443-448.
18. Burden, S. A. and Sastry, S. S. Reduction and Identification for Hybrid Dynamical Models of Terrestrial Locomotion. Proceedings of the SPIE conference on Micro-Nanotechnology Sensors, Systems, and Applications (DSS13), 2013.
19. Yang, I. and Burden, S. A. and Sastry, S. S. and Tomlin, C. J. Infinitesimal Interconnection Variation in Nonlinear Networked Systems. Proceeding of the 52nd IEEE Conference on Decision and Control, Pages 1417 – 1422. 2013.
20. Henrik Ohlsson, Michael Verhaegen and S. Shankar Sastry. Nonlinear Compressive Particle Filtering. In the Proceedings of the 52nd IEEE Conference on Decision Control, Dec. 10-13, 2013.
21. Henrik Ohlsson, Allen Yang, Roy Dong, and S. Shankar Sastry. Nonlinear Basis Pursuit. Proceedings of the 47th Asilomar Conference on Signals, Systems and Computers. Nov. 3-6, 2013.
22. Henrik Ohlsson, Yonina C. Eldar, Allen Yang, and S. Shankar Sastry. Compressive Shift Retrieval. ICASSP, page 6034-6038. IEEE, (2013).
23. Elhamifar, Ehsan and Yang, A. and Sastry, S. S. A Convex Optimization Framework for Active Learning. In proceedings, International Conference on Computer Vision 2013.
24. Henrik Ohlsson, Allen Y. Yang, Roy Dong and S. Shankar Sastry. “Compressive Phase Retrieval From Squared Output Measurements Via Semi-definite Programming”, 16th IFAC Symposium on System Identification, SYSID 2012.
25. Sam Burden, Henrik Ohlsson and S. Shankar Sastry. “Parameter Identification Near Periodic Orbits of Hybrid Dynamical Systems”. 16th IFAC Symposium on System Identification, SYSID 2012.
26. Henrik Ohlsson, Tianshi Chen, Sina Khoshfetrat Pakazad, Lennart Ljung, Shankar Sastry. Distributed Change Detection. 16th IFAC Symposium on System Identification, SYSID 2012.
27. Henrik Ohlsson, Yonina C. Eldar, Allen Y. Yang and S. Shankar Sastry. Compressive Shift Retrieval, International Conference on Acoustics, Speech and Signal Processing, ICASSP 2012.

28. Henrik Ohlsson, Allen Yang, Roy Dong and S. Shankar Sastry. CPRL -- An Extension of Compressive Sensing to the Phase Retrieval Problem, *Advances in Neural Information Processing Systems* 25 1376—1384 2012
29. Henrik Ohlsson, Allen Yang, Roy Dong and S. Shankar Sastry. Compressive Phase Retrieval via Lifting, *Proceedings of the Snowbird Workshop on Machine Learning*, 2012.
30. Dheeraj Singaraju, Roberto Tron, Ehsan Elhamifar, Allen Yang, and Shankar Sastry. On the Lagrangian biduality of sparsity minimization problems. *International Conference on Acoustics, Speech and Signal Processing, ICASSP*, 2012.
31. Alvaro A. Cárdenas, Saurabh Amin, Galina Schwartz, Roy Dong, Shankar Sastry. A Game Theory Model for Electricity Theft Detection and Privacy-Aware Control in AMI Systems. 2012 50th Annual Allerton Conference on Communication, Control, and Computing (Allerton). October 1-5, 2012.
32. Lillian Ratliff, Samuel Coogan, Daniel Calderone, S. Shankar Sastry. Pricing in Linear-Quadratic Dynamic Games. 50th Annual Allerton Conference on Communication, Control, and Computing, 2012.
33. Nikhil Naikal, Dheeraj Singaraju, Shankar Sastry. Using Models of Objects with Deformable Parts for Joint Categorization and Segmentation of Objects. *Proceedings of the Asian Conference on Computer Vision (ACCV) 2012, Part II, Lecture Notes in Computer Science*, Springer Verlag, LNCS Vol. 7725.
34. G. Schwartz, H. Tembine, S. Amin, and S. Sastry, Electricity demand response via randomized rewards, in *Proceedings of the 50th Annual Allerton Conference on Communication, Control, and Computing*, IEEE. Monticello, IL: IEEE Press, Oct. 2012.
35. Dheeraj Singaraju, Roberto Tron, Ehsan Elhamifar, Allen Y. Yang and S. Shankar Sastry. On the Lagrangian Biduality of Sparsity Minimization Problems. *Proceedings of the 2011 International Conference on Acoustics, Speech and Signal Processing (ICASSP)*
36. Samuel Burden, Humberto Gonzalez, Ram Vasudevan, Ruzena Bajcsy and S. Shankar Sastry. Numerical Integration of Hybrid Dynamical Systems via Domain Relaxation. *Proceedings of the 50th IEEE Conference on Decision and Control*, 2011
37. Samuel Burden, Shai Revzen and S. Shankar Sastry. Dimension Reduction Near Periodic Orbits of Hybrid Systems. *Proceedings of the 50th IEEE Conference on Decision and Control*, 2011.
38. Phoebus Chen, Kirak Hong, Nikhil Naikal, S. Shankar Sastry, Doug Tygar, Posu Yan, Allen Y. Yang. A Low-Bandwidth Camera Sensor Platform with Applications in Smart Camera Networks. *ACM Transactions on Sensor Networks (TOSN)*, 2011.
39. Hossein Mobahi, Shankar Rao, Allen Yang, Shankar Sastry, and Yi Ma. Segmentation of Natural Images by Texture and Boundary Compression. *International Journal of Computer Vision (IJCV)*, 2011.
40. P. Loiseau, G. A. Schwartz, J. Musacchio, S. Amin, and S. S. Sastry, Congestion pricing using a raffle-based scheme, *International Conference on Network Games, Control and Optimization (NetGCooP)*, 2011, IEEE, 2011, pp. 1–8.

41. G. A. Schwartz, S. Amin, and S. S. Sastry, On the interdependence of reliability and security in networked control systems, Proceedings of the IEEE Conference on Decision and Control, 2011, pp. 4078 – 4083.
42. M. Andreasson, S. Amin, G. A. Schwartz, K. H. Johansson, H. Sandberg, and S.S. Sastry, Correlated failures of power systems: Analysis of the Nordic grid, Workshop on Foundations of Dependable and Secure Cyber-Physical Systems (FDSCPS), CPSWeek 2011, Chicago, Il, 2011, pp. 9–17.
43. Hoover, S. Burden, X. Fu, S. Sastry, and R. Fearing. Bio-inspired design and dynamic maneuverability of a minimally actuated six-legged robot. In IEEE International Conference on Biomedical Robotics and Biomechatronics, 2010.
44. H. Gonzalez, R. Vasudevan, M. Kamgarpour, S. Sastry, R. Bajcsy, and C. Tomlin. "A Descent Algorithm for the Optimal Control of Constrained Switched Nonlinear Dynamical Systems". Proceedings of the 13th International Conference on Hybrid Systems: Computation and Control (HSCC'10). April 12-16, 2010.
45. H. Gonzalez, R. Vasudevan, M. Kamgarpour, S. Sastry, R. Bajcsy, and C. Tomlin. "A Numerical Methods for the optimal control of Switched Systems". Proceedings of the 49th IEEE Conference on Decision and Control (CDC 2010). December 14-17, 2010.
46. Shankar Rao, Allen Yang, Shankar Sastry, and Yi Ma, Robust Algebraic Segmentation of Mixed Rigid-Body and Planar Motions. International Journal of Computer Vision (IJCV), 2010.
47. Allen Yang, Michael Gastpar, Ruzena Bajcsy, and Shankar Sastry. Distributed Sensor Perception via Sparse Representation. Proceedings of the IEEE, Vol. 98. No.6, pp. 1077-1088, June 2010.
48. Allen Yang, Zihan Zhou, Yi Ma, and Shankar Sastry. Towards a Robust Face Recognition System using Compressive Sensing. InterSpeech, 2010.
49. Allen Yang, Arvind Ganesh, Yi Ma, and Shankar Sastry. Fast ℓ_1 -minimization algorithms and an application in robust face recognition: A review. International Conference on Image Processing (ICIP), 2010.
50. Nikhil Naikal, Allen Yang, and Shankar Sastry. Towards an efficient distributed object recognition system in wireless smart camera networks. IEEE Information Fusion, 2010. (Best Student Paper Award, Honorable Mention)
51. B. Godbehere, S. S. Sastry. "Stabilization of planar switched linear systems using polar coordinates." Proceedings of the 13th ACM international conference on Hybrid Systems: Computation and Control, Stockholm, Sweden, 2010.
52. Hoam Chung, Elijah Polak, and S. Shankar Sastry, "On the Use of Outer Approximations as an External Active Set Strategy," Journal of Optimization Theory and Application, 146(1):51-75, 2010.
53. P. J. From, V. Duindam, K. Y. Pettersen, J. T. Gravdahl, S. Sastry "Singularity-free dynamic equations of vehicle–manipulator systems" Simulation Modelling Practice and Theory 18(6) pp. 712-731, June 2010.
54. V. Duindam, J. Xu, R. Alterovitz, S. Sastry, K. Goldberg, "3D Motion Planning Algorithms for Steerable Needles Using Inverse Kinematics" International Journal of Robotics Research 29(7) pp. 789 -- 800, June 2010.

55. Saurabh Amin, Alvaro Cardenas, S. Shankar Sastry, "Safe and Secure Networked Control Systems Under Denial-of-Service Attacks." *Hybrid Systems: Computation and Control*, Lecture Notes in Computer Science. Springer Berlin / Heidelberg, 31-45, 30, April, 2009
56. Alvaro Cardenas, Tanya Roosta, S. Shankar Sastry, Rethinking Security Properties, Threat Models and the Design Space in Sensor Networks : A case study in SCADA systems, *Ad Hoc Networks*, May, 2009
57. Hoam Chung, Elijah Polak, and S. Shankar Sastry, "An External Active-Set Strategy for Solving Optimal Control Problems," *IEEE Transactions on Automatic Control*, Vol.54, No.5, pp1129 - 1133, 2009.
58. Milosh Drezgic, Andrew P. Hines, Mohan Sarovar, Shankar Sastry, "Complete characterization of mixing time for the continuous quantum walk on the hypercube with Markovian decoherence model" *Quantum Information and Computation*, Vol. 9, No. 9&10 (2009) 0856–0878
59. P. J. From, V. Duindam, J. T. Gravdahl, S. Sastry, "Modeling and Motion Planning for Mechanisms on a Non-Inertial Base" *Proceedings of the IEEE International Conference on Robotics and Automation (ICRA)*, May 2009.
60. Kirak Hong, Posu Yan, Phoebus Chen, Songhwai Oh, and Shankar Sastry, "Multihop routing in camera sensor networks - an experimental study (poster)" in *Proceedings of the Eighth International Conference on Information Processing in Sensor Networks (IPSN)*, April 2009.
61. YuLun Huang, Alvaro Cardenas, Saurabh Amin, Song-Zyun Lin , Hsin-Yi Tsai, S. Shankar Sastry Understanding the Physical and Economic Consequences of Attacks Against Control Systems, *International Journal of Critical Infrastructure Protection*, in publication, 2009
62. E.J. Lobaton, P. Ahammad, and S.S. Sastry, "Algebraic Approach for Recovering Topology in Distributed Camera Networks," *ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN 2009)*, San Francisco, CA, April, 2009.
63. E J Lobaton, R Vasudevan, S S Sastry, R Bajcsy, "Robust Construction of the Camera Network Complex for Topology Recovery" *International Conference on Distributed Smart Cameras (ICDSC)*, Como, Italy; 2009
64. Songhwai Oh, Stuart Russell, and Shankar Sastry, "Markov chain Monte Carlo data association for multi-target tracking," *IEEE Transactions on Automatic Control*, vol. 54, no. 3, pp 481-497, Mar. 2009.
65. J. Sprinkle, J. M. Eklund, H. Gonzalez, E. I. Grötli, B. Upcroft, A. Makarenko, W. Uther, M. Moser, R. Fitch, H. Durrant-Whyte and S. S. Sastry. Model-based design: a report from the trenches of the DARPA Urban Challenge. *Software and Systems Modeling*, 2009.
66. Eric Guenterberg, Allen Yang, Roozbeh Jafari, Ruzena Bajcsy, and Shankar Sastry. A Method for Extracting Temporal Parameters Based on Hidden Markov Models in Body Sensor Networks With Inertial Sensors. *IEEE Transactions on Information Technology in BioMedicine*, 2009.
67. Allen Yang, Roozbeh Jafari, Shankar Sastry, and Ruzena Bajcsy. Distributed Recognition of Human Actions Using Wearable Motion Sensor Networks. *Journal of Ambient Intelligence and Sensor Environments (JAISE)*, 2009.

68. John Wright, Allen Yang, Arvind Ganesh, Shankar Sastry, and Yi Ma. Robust face recognition via sparse representation. *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, Feb, 2009.
69. Shankar Rao, Hossein Mobahi, Allen Yang, Shankar Sastry, and Yi Ma. Natural Image Segmentation with Adaptive Texture and Boundary Encoding. *Asian Conference on Computer Vision (ACCV)*, 2009.
70. Allen Yang, Subhransu Maji, Mario Christoudas, Trevor Darrell, Jitendra Malik, and Shankar Sastry. Multiple-view object recognition in band-limited distributed camera networks. *International Conference on Distributed Smart Cameras (ICDSC)*, 2009.
71. Allen Yang, Subhransu Maji, Kirak Hong, Posu Yan, and Shankar Sastry. Distributed compression and fusion of nonnegative sparse signals for multiple-view object recognition. *International Conference on Information Fusion*, 2009.
72. Philip Kuryloski, Annarita Giani, Roberta Giannantonio, Katherine Gilani, Ville-Pekka Seppa, Edmund Seto, Raffaele Gravina, Victor Shia, Curtis Wang, Posu Yan, Allen Yang, Jari Hyttinen, Shankar Sastry, Stephen Wicker, and Ruzena Bajcsy. DexterNet: An open platform for heterogeneous body sensor networks and its applications. *Body Sensor Networks (BSN) Workshop*, 2009.
73. Giani, S. Sastry, K. H. Johansson, and H. Sandberg, The VIKING project: an initiative on resilient control of power networks, *IEEE International Symposium on Resilient Control Systems*, Idaho Falls, ID, USA, 2009.
74. Abate, Lygeros, J. & Sastry, S. Probabilistic Safety and Optimal Control for Survival Analysis of *Bacillus Subtilis*, *Systems and Control Letters*, December 19, 2009.
75. Abate, A., Tiwari, A. & Sastry, S., Box Invariance in biologically-inspired dynamical systems, *Automatica* Vol. 45(7) , pp. 1601-1610, 2009.
76. Abate, D'Innocenzo, A., Di Benedetto, M. & Sastry, S. Understanding Deadlock and Livelock Behaviors in Hybrid Control Systems, *Nonlinear Analysis: Hybrid Systems*, Vol. 3(2) , pp. 150-162, 2009.
77. Abate, M. Prandini, J. Lygeros, and S. Sastry. "Probabilistic Reachability and Safety for Controlled Discrete Time Stochastic Hybrid Systems" , *Automatica*, Vol. 44. no.11, pp.2724-2734, 2008.
78. Abate, A. D'Innocenzo, M.D. Di Benedetto, and S. Sastry. "Markov Set-Chains as abstractions of Stochastic Hybrid Systems". *Proceedings of the Workshop on Hybrid Systems: Computation and Control*, 2008.
79. Abate, M. Prandini, J. Lygeros, and S. Sastry. "Approximation of General Stochastic Hybrid Systems by Switching Diffusions with Random Hybrid Jumps." *Proceedings of the workshop on Hybrid Systems: Computation and Control*, 2008
80. Allen Yang, John Wright, Yi Ma, and Shankar Sastry. "Unsupervised Segmentation of Natural Images via Lossy Data Compression". *Computer Vision and Image Understanding (CVIU)*, 2008.
81. Alvaro A. Cárdenas, Saurabh Amin, Shankar Sastry. "Secure Control:Towards Survivable Cyber-Physical Systems". *First International Workshop on Cyber-Physical Systems (WCPS2008)*. Beijing, China. June 2008.
82. Alvaro A. Cárdenas, Tanya Roosta, Gelareh Taban, Shankar Sastry. "Cybersecurity: Basic Defenses and Attack Trends". In Giorgio Franceschetti and Marina Grossi Eds. *Homeland Security. A multi-faceted technological challenge*. Artech House, 2008.

83. Annarita Giani, Tanya Roosta, Shankar Sastry. "Integrity Checker for Wireless Sensor Networks in Health Care Applications". 2nd International Conference on Pervasive Computing Technologies for Healthcare, January 2008, Tampere, Finland.
84. Gonzalez, H., Grøtli, E. I., Templeton, T. R., Biermeyer, J. O., Sprinkle, J. and Sastry, S. S. "Transitioning control and sensing technologies from fully-autonomous driving to driver assistance systems". Automatisierungs, Assistenzsysteme und eingebettete Systeme für Transportmittel, Braunschweig, Germany, Februar 13-14, 2008.
85. Hoam Chung, Elijah Polak, and Shankar Sastry, "An Accelerator for Packages Solving Discrete-Time Optimal Control Problems". Proceedings of the IFAC World Congress 2008 .
86. Hoam Chung, Elijah Polak, and Shankar Sastry. "Enhancements for Contractive Receding Horizon Control" Proceedings of the IFAC World Congress 2008..
87. Jerry Ding, Jonathan Sprinkle, S. Shankar Sastry, Claire Tomlin. "Reachability Calculations for Automated Aerial Refueling." IEEE Conference on Decision and Control, IEEE, December, 2008.
88. John Wright, Allen Yang, Arvind Ganesh, Shankar Sastry, and Yi Ma. "Robust face recognition via sparse representation". IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), 2008.
89. Jonathan Sprinkle, J. Mikael Eklund, Humberto Gonzalez, Esten Grøtli, Pannag R Sanketi, Michael Moser, S. Shankar Sastry. "Recovering Models of a Four-Wheel Vehicle Using Vehicular Systems Data". IEEE Conference on Decision and Control, IEEE, December, 2008.
90. Sameer Pai, Marci Meingast, Tanya Roosta, Sergio Bermudez, Stephen Wicker, Deirdre K. Mulligan, Shankar Sastry. "Confidentiality in Sensor Networks: Transactional Information". IEEE Security and Privacy magazine, July-Aug 2008, Vol.6, No.4, pp. 28-35.
91. Tanya Roosta, Martin J. Wainwright, Shankar Sastry. "Convergence Analysis of Reweighted Sum-Product Algorithms". IEEE Transactions on Signal Processing, Sept. 2008, Vol. 56, No.9, pp. 4293-4305 .
92. Tanya Roosta, Wei-Chieh Liao, Wei-Chung Teng , Shankar Sastry. "Testbed Implementation of A Secure Flooding Time Synchronization Protocol". IEEE Wireless Communication and Networking Conference (WCNC) 2008.
93. Vincent Duintam, Ron Alterovitz, Shankar Sastry, and Ken Goldberg. "Screw-Based Motion Planning for Bevel-Tip Flexible Needles in 3D Environments with Obstacles". Proceedings of the IEEE International Conference on Robotics and Automation, May 2008.
94. Phoebus Chen, Parvez Ahammad, Colby Boyer, Shih-I Huang, Leon Lin, Edgar Lobaton, Marci Meingast, Songhwai Oh, Simon Wang, Posu Yan, Allen Yang, Chuohao Yeo, Lung-Chung Chang, Doug Tygar, and Shankar Sastry. "CITRIC: A Low-Bandwidth Wireless Camera Network Platform", International Conference on Distributed Smart Cameras (ICDSC), 2008.
95. Allen Yang, Roozbeh Jafari, Philip Kuryloski, Sameer Iyengar, Shankar Sastry, and Ruzena Bajcsy. "Distributed Segmentation and Classification of Human Actions Using a Wearable Sensor Network". CVPR Workshop on Human Communicative Behavior Analysis, 2008.
96. Songhwai Oh, Inseok Hwang, and Shankar Sastry, " Distributed Multitarget Tracking and Identity Management," Journal of Guidance, Control, and Dynamics, vol. 31, no. 1, pp. 12-29, Jan. 2008.
97. Marci Meingast, Manish Kushwaha, Songhwai Oh, Xenofon Koutsoukos, Akos Ledeczki, and Shankar Sastry, "Fusion-Based Localization for a Heterogeneous Camera Network,"

- in Proc. of the ACM/IEEE International Conference on Distributed Smart Cameras (ICDSC), Stanford University, CA, Sep. 2008.
98. Damiano Varagnolo, Phoebus Chen, Luca Schenato, and Shankar Sastry, Performance Analysis of Different Routing Protocols in Wireless Sensor Networks for Real-Time Estimation, CDC Paper 2008
 99. Alvaro A. Cárdenas, Saurabh Amin, Shankar Sastry. Research Challenges for the Security of Control Systems, 3rd USENIX workshop on Hot Topics in Security (HotSec '08). Associated with the 17th USENIX Security Symposium. San Jose, CA, USA. July 2008.
 100. H. Shim and S. Sastry, "A Dynamic Path Generation Method for a UAV Swarm in the Urban Environment," AIAA Guidance, Navigation, and Control Conference, August 2008
 101. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, and S. Sastry. Optimal Linear LQG Control Over Lossy Networks Without Packet Acknowledgment. Asian Journal of Control, accepted, Volume 10, Issue 1, January 2008
 102. C Yeo, P Ahammad, K Ramchandran, S Sastry. High Speed Action Recognition and Localization in Compressed Domain Videos. IEEE Transactions on Circuits and Systems for Video Technology: Special issue on Video Surveillance - August 2008.
 103. M Kushwaha, I Amundson, P Volgyesi, P Ahammad, G Simon, X Koutsoukos, A Ledeczi, S Sastry. Multi-modal Target Tracking using Heterogeneous Sensor Networks. Proceedings of 17th International Conference on Computer Communications and Networks (ICCCN) - 2008.
 104. P Ahammad, C Harmon, A Hammonds, S Celniker, S Sastry, GM Rubin. Constructing Data-Driven Fate-maps for Drosophila Melanogaster Imaginal discs via High-throughput Imaging Methods. Abstract @ Workshop on Bioimage Informatics (WBI), Santa Barbara, CA - 2008.
 105. R Vasudevan, P Ahammad, R Bajcsy, S Sastry. Single Trial Multicomponent ERP Estimation via Nonparametric Entropy Minimization. Abstract @ Computational and Systems Neuroscience Meeting (CoSyne) - 2008.
 106. Harmon, P. Ahammad, A. Hammonds, R. Weiszmann, S. Celniker, S. Sastry, and G. Rubin, "Comparative analysis of spatial patterns of gene expression in Drosophila melanogaster imaginal discs", Intern. Conf. Research in Computational Molecular Biology (RECOMB), (2007).
 107. Oh, S., L. Schenato, P. Chen and S. Sastry. "Tracking and coordination of multiple agents using sensor networks: system design, algorithms and experiments". Proceedings of the IEEE, vol. 95 (1): pp. 234-54. Jan. 2007.
 108. S. Pai, T. Roosta, S. Sastry, S. Wicker. "Using Social Network Theory Towards Development Of Wireless Ad hoc Network Trust". In: the 3rd IEEE International Symposium on Security in Networks and Distributed Systems (SSNDS-07), Canada. May 2007.
 109. T. Roosta, M. Manzo, S. Sastry."Time Synchronization Attacks in Sensor Networks", In: Poovendran, Wang, Roy (ed.), Advances in Information Security series, Vol. 30, Springer, ISBN 978-0-387-32721. 2007.
 110. T. Roosta, S. Pai, P. Chen, S. Sastry, S. Wicker. "Inherent Security of Routing Protocols in Ad-Hoc and Sensor Networks". IEEE Globecom 2007.
 111. Chuohao Yeo, Parvez Ahammad, Kannan Ramchandran, Shankar Sastry, 'High Speed Action Recognition and Localization in Compressed Domain Videos', Journal Manuscript, IEEE Transactions on Circuits and Systems for Video Technology.
 112. Parvez Ahammad, Chuohao Yeo, Kannan Ramchandran, Shankar Sastry, 'Unsupervised Discovery of Action Hierarchies in Large Collections of Activity Videos',

- Proceedings of IEEE International Workshop on Multimedia Signal Processing (MMSP) 2007.
113. Marci Meingast, Songhwai Oh, and Shankar Sastry, "Automatic camera network localization using object image tracks," in Proc. of the IEEE International Conference on Computer Vision (ICCV) Workshop on Visual Representations and Modeling of Large-scale environments, Rio de Janeiro, Brazil, Oct. 2007.
 114. Songhwai Oh and Shankar Sastry, "Approximate estimation of distributed networked control systems," in Proc. of the American Control Conference (ACC), New York, NY, July 2007.
 115. H. Shim and S. Sastry, "An Evasive Maneuvering Algorithm for UAVs in See-and-Avoid Situations," to appear in American Control Conference, 2007.
 116. T. Templeton, D. H. Shim, C. Geyer, and S. Sastry, "Autonomous Vision-based Terrain Mapping using an Unmanned Aerial Vehicle," International Conference on Robotics and Automation, 2007.
 117. Jessica J. Pannequin, Alexandre M. Bayen, Ian M. Mitchell, Hoam Chung, and Shankar Sastry, "Multiple Aircraft Deconflicted Path Planning with Weather Avoidance Constraints," AIAA GN&C Conference, 2007.
 118. Jeremy Schiff, Marci Meingast, Deirdre K. Mulligan, Shankar Sastry, and Ken Goldberg. "Respectful Cameras: Detecting Visual Markers in Real-Time to Address Privacy Concerns" International Conference on Intelligent Robots and Systems (IROS) . San Diego, California. October 2007.
 119. Zhu, Bonnie; Sinopoli, Bruno; Poolla, Kameshwar; Sastry, Shankar; "Estimation over Wireless Sensor Networks" American Control Conference, 2007. ACC '07 9-13 July 2007 Page(s):2732 – 2737.
 120. Ames, A. Abate and S. Sastry, "Sufficient Conditions for the Existence of Zeno Behavior in Nonlinear Hybrid Systems via Constant Approximations", in the Proceedings of the 46th the Decision and Control Conference, New Orleans, LA, Dec. 2007.
 121. Abate, S. Amin, M. Prandini, J. Lygeros, and S. Sastry, "Computational Approaches to Reachability Analysis of Stochastic Hybrid Systems", In A. Bemporad, A. Bicchi, and G. Buttazzo, eds.: *Hybrid Systems: Computation and Control*. Lecture Notes in Computer Science 4416, pp. 4-17. Springer Verlag. Presented at the 10th International Workshop on Hybrid Systems, Pisa (IT), April 2007.
 122. Saurabh Amin, Alexandre M. Bayen, Laurent El Ghaoui, and Shankar Sastry. "Robust feasibility for control of water flow in a reservoir-canal system." Proceedings of the 46th IEEE conference on decision and control, New Orleans, LA, USA, Dec 12-14, 2007.
 123. J. Mikael Eklund, Jonathan Sprinkle, Todd Templeton and S. Shankar Sastry. "Transitioning Intelligence to Embedded Platforms." In *AVT-146 Symposium on Platform Innovations and System Integration for Unmanned Air, Land and Sea Vehicles*., . NATO, May, 2007.
 124. Abate, A., D'Innocenzo, A., Pola, G., Benedetto, M.D. & Sastry, S. The Concept of Deadlock and Livelock in Hybrid Control Systems. *Hybrid Systems: Computation and Control - Lecture Notes in Computer Science 4416* , pp. 628-632.
 125. Abate, A., Tiwari, A. & Sastry, S. Box Invariance for biologically-inspired dynamical systems. 46th IEEE Conference on Decision and Control and European Control Conference , pp. 5162-5167.
 126. L. Schenato, B. Sinopoli, M. Franceschetti, K. Poolla, S. S. Sastry. Foundations of control and estimation over lossy networks. Proceedings of the IEEE, 95(1), pp. 163-187, January 2007.

127. V. Duindam, S. Sastry. Geometric Motion Estimation and Control for Robotic-Assisted Beating-Heart Surgery. Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems pp. 871 -- 876, October 2007.
128. P. Ahammad, R. Bajcsy, G. Simpson, and S. Sastry, "Tools for characterization and classification of brain activity via magnetoencephalography", Cold Spring Harbor Lab. Conf. on Engineering Principles in Biological Systems.(CSHL-BioSys). 2006.
129. S. Amin, A. Abate, M. Prandini, J. Lygeros and S. Sastry, "Reachability analysis for controlled time stochastic hybrid systems", in Lecture Notes in Computer Science, Springer Verlag, Berlin, vol. 3927, pp. 49-63, 2006.
130. P.Chen, Songhwai Oh, M. Manzo, B. Sinopoli, C. Sharp, K.Whitehouse, Gi.Tolle, J. Jeong, P. Dutta, J. Hui, S. Schaffert, S. Kim, J. Taneja, B. Zhu, T. Roosta, M. Howard, D. Culler, and S. Sastry "Experiments in Instrumenting Wireless Sensor Networks for Real-Time Surveillance (video)," in Proc. of the International Conference on Robotics and Automation (ICRA), Orlando, FL, May 2006.
131. J. Fern, J. Kempe, S. N. Simic, and S.Sastry, "Generalized performance of concatenated quantum codes—A dynamical systems approach", IEEE Trans. Automatic Control, Vol51(3), pp. 448 – 459, March 2006.
132. Harmon, P. Ahammad, A. Hammonds, G. Rubin, and S. Sastry, "Building an atlas of gene expression in Drosophila melanogaster imaginal discs", Cold Spring Harbor Lab. Conf. on Genome Informatics (CSHL-GI),2006.
133. Oh, S. and S. Sastry, "Distributed Networked Control System with Lossy Links: State Estimation and Stabilizing Communication Control," in Proc. of the IEEE International Conference on Decision and Control (CDC), San Diego, CA, Dec. 2006.
134. Oh, S., P. Chen, M. Manzo, and S. Sastry, "Instrumenting Wireless Sensor Networks for Real-time Surveillance," in Proc. of the International Conference on Robotics and Automation (ICRA), Orlando, FL, May 2006.
135. T. Roosta, M. Menzo and S. Sastry, "Probabilistic geographic routing protocol for ad hoc and sensor networks". Proc. Int. Workshop Wireless Ad Hoc Networks, May 2005, (published 2006).
136. R. Vidal, Y. Ma, S. Soatto, and S. Sastry, "Two-view multibody structure from motion", Int. J. Computer Science, (On line version), 2006.
137. Yeo, P. Ahammad, K. Ramchandran and S. Sastry, "Compressed domain real-time action recognition", Proc. IEEE International Workshop on Multimedia Signal Processing (MMSP) 4pp. 2006.
138. Abate, A. A. Ames and S. Sastry. "A priori detection of Zeno behavior in communication networks modeled as hybrid systems", Proc. 25th IEEE Am. Control Conf. , Minneapolis, MN June 2006.
139. Abate, A., Amin, S., Prandini, M., Lygeros, J. & Sastry, S. Probabilistic reachability and safe sets computation for discrete time stochastic hybrid systems. Proceedings of the 45th IEEE Conference of Decision and Control, pp. 258-263.
140. Abate, A., Chen, M. & Sastry, S. Analysis of an Implementable Application Layer Scheme for Flow Control over Wireless Networks. Proceedings of the 17th International Symposium on Mathematical Theory of Networks and Systems, pp. 701-708.
141. Aaron D. Ames and Shankar Sastry. Hybrid Geometric Reduction of Hybrid Systems. 45th IEEE Conference on Decision and Control, San Diego, CA, 2006. (Awarded best paper of session.)
142. Aaron D. Ames, Robert D. Gregg, Eric D.B. Wendel and Shankar Sastry. On the Geometric Reduction of Controlled Three-Dimensional Bipedal Robotic Walkers. 3rd Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control (LHMNL'06), Nagoya Japan.

143. Aaron D. Ames and Shankar Sastry. Hybrid Routhian Reduction of Lagrangian Hybrid Systems. 2006 American Control Conference, Minneapolis, MN.
144. Aaron D. Ames and Shankar Sastry. Hybrid Cotangent Bundle Reduction of Simple Hybrid Mechanical Systems with Symmetry. 2006 American Control Conference, Minneapolis, MN.
145. Aaron D. Ames, Haiyang Zheng, Robert Gregg and Shankar Sastry. Is there Life after Zeno? Taking Executions past the Breaking (Zeno) Point. 2006 American Control Conference, Minneapolis, MN.
146. Alessandro Abate, Aaron D. Ames and Shankar Sastry. Error-Bounds Based Stochastic Approximations and Simulations of Hybrid Dynamical Systems. 2006 American Control Conference, Minneapolis, MN.
147. Aaron D. Ames, Paulo Tabuada and Shankar Sastry, "On the Stability of Zeno Equilibria," In Hybrid Systems: Computation and Control 2006, Santa Barbara, CA.
148. Geyer, T. Templeton, M. Meingast, and S. Sastry. The Recursive Multi-Frame Planar Parallax Algorithm. Presented at 3DPVT'06.
149. D.H. Shim, Hoam Chung and S. Sastry, "Conflict-free navigation in unknown urban environments," IEEE Robotics & Automation Society Magazine, Volume 13, Issue 3, Sept. 2006, Page(s):27 – 33. Hoam Chung and S. Sastry, "Autonomous Helicopter Formation using Model Predictive Control", AIAA GN&C Conference, Keystone, Colorado, 2006.
150. J. M. Eklund, T. R. Hansen, and S. Sastry, "SensorNet: Information technology for assisted living at home: Building a wireless infrastructure for assisted living," *Proc. 27th Annual Conference on Engineering in Medicine and Biology (EMBC)*, San Francisco, 2005.
151. T. Hansen, J. Eklund, J. Sprinkle, R. Bajcsy and S. Sastry, "Using smart sensors and a camera phone to detect and verify the fall of elderly persons", *Proceedings of the European Medical and Biological Engineering Conference*, London, November 2005.
152. Ames, A. Sangiovanni-Vincentelli and S. Sastry, "Heterogeneous Semantic Preserving Deployments of Heterogeneous Networks of Embedded Systems", *Proceedings of the Workshop on Network Embedded Sensing and Control*, Notre Dame, October 2005.
153. J. Sprinkle, A. Ames and S. Sastry, "On the partitioning of syntax and semantics for hybrid systems tools", *Proceedings of the 44th Conference on Decision and Control*, Seville, Spain December 2005.
154. Ames and A. Abate and S. Sastry, "Sufficient Conditions for the Existence of Zeno Behavior", *Proceedings of the 44th Conference on Decision and Control*, Seville, Spain December 2005.
155. S. Oh, I. Hwang, K. Roy and S. Sastry, "A fully automated distributed multiple target tracking and identity management algorithm," *Proc. AIAA Conf. on Guidance, Navigation and Control*, San Francisco, August 2005.
156. Sharp, A. Schaffert, N. Woo, C. Sastry, S. Karlof, S. Sastry, and D. Culler, "Design and implementation of a sensor network system for vehicle tracking and autonomous interception," *Proc. 2nd IEEE European Workshop on Wireless Sensor Networks*, pp. 93-107, 2005.
157. H. Shim, H. Chung, H.J. Kim and S. Sastry, "Autonomous exploration in unknown urban environments for unmanned aerial vehicles, *Proceedings of the AIAA Guidance, Navigation and Control Conference*, August 2005.

158. J. Sprinkle, A. Ames, A. Pinto, H. Zheng and S. Sastry, "On the partitioning of syntax and semantics," *44th IEEE Conference on Decision and Control and European Control Conference*, pp. 4694-4699, December 2005.
159. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla and S. Sastry, "Estimation and Control over Lossy Networks", *Proceedings of the 43rd Annual Allerton Conference on Communication, Control and Computing*. October 2005.
160. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla and S. Sastry, "An LQG Optimal Linear Controller for Control Systems with Packet Losses", *Proceedings of the 44th IEEE Conference on Decision and Control, Seville, Spain*, December 2005.
161. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla and S. Sastry, "LQG Optimal Linear Control with Missing Observation and Control Packets", *Proceedings of the IFAC World Congress, Prague, Czech Republic*, July 2005.
162. J. Hu, M. Prandini and **Sastry, S**, "Aircraft conflict prediction in the presence of a spatially correlated wind field," *IEEE Transactions on Intelligent Transportation Systems*, vol. 6 (3), pp.326-40, 2005.
163. J. Sprinkle, A. Ames, M. Eklund, J. Mitchell, and S. Sastry, "Online safety calculations for glide slope recapture," *Innovations in Systems Software*, vol. 1, pp. 157-175, 2005.
164. Y. Ma, K. Huang, R. Vidal, J. Kosecka and S. Sastry, "Rank conditions on the multiple view matrix," *Intern. J. of Computer Vision*, vol. 59(2), pp. 115-137, September 2004.
165. L. Schenato, W.C. Wu, S. Sastry, "Attitude Control for a Micromechanical Flying Insect via Sensor Output Feedback," *IEEE Transactions on Robotics and Automation*, Vol. 20, No. 1, February 2004.
166. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, M. I. Jordan and S. S. Sastry, "Kalman filtering with intermittent observations," *IEEE Transactions on Automatic Control*, vol. 49 (9), pp.. 1453-64, 2004.
167. J. Zhang, J. Vala, S. Sastry and K. B. Whaley, "Optimal quantum circuit synthesis from controlled-unitary gates," *Physical Review A*. vol. 69(4), pp.. 42309-1-6, Publisher: APS through AIP, USA. 2004
168. J. Zhang, J. Vala, S. Sastry and K. B. Whaley, "Minimum construction of two-qubit quantum operations," *Physical Review Letters*, Publisher: APS, USA.vol. 93(2), pp.. 020502/1-4, 2004.
169. R. Vidal, O. Shakernia and **S. Sastry**, "Following the flock. Distributed formation control with omnidirectional vision-based motion segmentation and visual servoing," *IEEE Robotics & Automation Magazine*. December 2004.
170. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla and **S.S. Sastry**, "Time varying optimal control with packet losses," *43rd IEEE Conference on Decision and Control*, vol. 2, pp.. 1938-43, 2004.
171. J. Sprinkle, M. Eklund, H. J. Kim and S. Sastry, "Encoding aerial pursuit/evasion games with fixed wing aircraft into a nonlinear model predictive tracking controller," *43rd IEEE Conference on Decision and Control* vol. 3, pp.. 1938-43, 2004.
172. J. Sprinkle, J. M. Eklund and S. S. Sastry, "Toward design parameterization support for model predictive control," *IEEE 4th Int. Conf. Intelligent Systems Design and Applications Conf.* Budapest Aug. 2004.

173. Abate, A.D. Ames and S.Sastry,. “Stochastic approximations of hybrid systems,” *Proc.2005 IEEE American Control Conference*, vol 3, pp.1557-62, 2005
174. P. Ahammad, C. L. Harmon, A. Hammonds, S. Sastry, and G. Rubin, “Joint Nonparametric Alignment for Analyzing Gene Expression Patterns in *Drosophila* Imaginal Discs”, *IEEE Conference on Computer Vision and Pattern Recognition*, June 2005.
175. A. Ames and S. Sastry, “Rethinking Hybrid Systems: A Categorical Approach”, *Proceedings of the 10th International Workshop on Hybrid Systems: Computation and Control*, Zurich, April 2005.
176. M. C. Cavusoglu, J. Rotella, W. Newman, S. Choi, J. Ustin, and S. Sastry, “Control Algorithms for Active Relative Motion Canceling for Robotic Assisted Off-Pump Coronary Artery Bypass Graft Surgery”, *Proceedings of the 12th International Conference on Advanced Robotics*, July 2005.
177. J. M. Eklund, T. R. Hansen, J. Sprinkle, and S. Sastry, ”Information Technology for Assisted Living at Home: Building a Wireless Infrastructure for Assisted Living”, *Proceedings of the 27th Annual Conference on Engineering in Medicine and Biology (EMB)*, 2005.
178. S. Oh and S. Sastry, “A polynomial time approximation algorithm for joint probabilistic data association”, *Proceedings of the American Control Conference*, 2005.
179. S. Oh, I. Hwang, K. Roy, and S. Sastry, “A Fully Automated Distributed Multiple Target Tracking and Identity Management Algorithm”, *Proceedings of the AIAA Conference on Guidance, Navigation and Control*, San Francisco, August 2005.
180. L. Schenato, S. Oh, S. Sastry, and P. Bose, “Swarm Coordination for Pursuit Evasion Games Using Sensor Networks”, *IEEE Conference on Robotics and Automation*, April 2005.
181. Sharp. S. Shaffert, A. Woo, N. Sastry, C. Karlof, S. Sastry, and D. Culler, “Design and Implementation of a sensor network system for vehicle tracking and autonomous interception”, *Proceedings of the Second European Workshop on Wireless Sensor Networks*, 2005.
182. J. Sprinkle, A. Ames, A. Pinto, H. Zheng, and S. Sastry, “On the Partitioning of Syntax and Semantics”, *Proceedings of the 44th IEEE Conference on Decision and Control*, Dec. 2005.
183. J. Sprinkle, M.Eklund, and S. Sastry, “Deciding to land a UAV safely in real time”, *Proceedings of the American Control Conference*, June 2005.
184. J. Sprinkle, A. Ames, M. Eklund, J. Mitchell, and S. Sastry, “Online Safety Calculations for Glide Slope Recapture”, *Innovations in Systems Software*, Vol. 1, 2005, pp. 157-175.
185. Abate, L. Shi, S. Simic, and S. Sastry, “A Stability Criterion for Stochastic Hybrid Systems”, *Proceedings of the 18th International Symposium on the Mathematical Theory of Networks and Systems*, 2004.
186. T. Goktekin, M. C. Cavusoglu, F. Tendick and S. Sastry, “GiPSi: An Open Source Open Architecture Software Development Framework for Surgical Simulation”, *Proceedings of the International Conference on Medical Simulation*, June 2004, Cambridge, MA.

187. D. Ames and S. Sastry, "Blowing Up Hybrid Systems", Proceedings of the 43rd IEEE Conference on Decision and Control, Dec 2004.
188. J. Hu, W-C. Wu, and S. Sastry, "Modeling subtilin production in Bacillus Subtilis using stochastic hybrid systems", in Proceedings of the 7th International Workshop on Hybrid Systems: Computation and Control, Springer Verlag Lecture Notes in Computer Science, LNCS Vol. 2893.
189. M. Meingast, C. Geyer, and S. Sastry, "Vision based terrain recovery for landing unmanned aerial vehicles," Proceedings of the 43rd IEEE Conference on Decision and Control, Dec 2004, pp. 1870-1875.
190. Y. Ng, H. J. Kim, M. Jordan and S. Sastry, "Autonomous Helicopter Flight via Reinforcement Learning", in Advances in Neural Information Processing, 2004.
191. S. Oh, J. Kim, and S. Sastry, "A Sampling Based Approach to Nonparametric Dynamic Systems Identification and Estimation", Proceedings of the 2004 American Control Conference,
192. S. Oh, S. Russell, and S. Sastry, "Markov Chain Monte Carlo data association for general multiple target tracking problems," Proceedings of the 43rd IEEE Conference on Decision and Control, Dec 2004, pp. 735-742.
193. L. Schenato, W-C. Wu, and S. Sastry, "Altitude Control for a micromechanical flying insect via sensor output feedback", IEEE Transactions on Robotics and Automation, Vol. 20, 2004, pp. 93-106.
194. L. Shi, A. Abate and S. Sastry, "Optimal Control for a Class of Stochastic Hybrid Systems", Proceedings of the 43rd IEEE Conference on Decision and Control, Dec 2004, pp. 1842-1847.
195. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, and S. Sastry, "Time varying optimal control with packet losses," *Proceedings of the 43rd IEEE Conference on Decision and Control*, Dec 2004.
196. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, M. Jordan, and S. Sastry, "Kalman filtering with intermittent observations", *IEEE Transactions on Automatic Control*, Vol. 49, pp. 1453-1464.
197. J. Sprinkle, M. Eklund, and S. Sastry, "Toward Design Parameterization Support for Model Predictive Control", *Proceedings of the 4th International Conference on Intelligent Systems Design and Applications*, August 2004.
198. J. Sprinkle, M. Eklund, H. J. Kim, and S. Sastry, "Encoding aerial pursuit evasion games with fixed wing aircraft into a nonlinear model predictive tracking controller," *Proceedings of the 43rd IEEE Conference on Decision and Control*, Dec 2004, pp. 1938-1943.
199. R. Vidal, O. Shakernia, and S. Sastry, "Following the flock: distributed formation control with omni-directional vision-based motion segmentation and visual servoing", *IEEE Robotics and Automation Magazine*, December 2004.
200. J. Zhang, J. Vala, S. Sastry, B. Whaley, "Optimal Quantum Circuit Synthesis from controlled unitary gates, *Physical Review A*, 2004.
201. J. Zhang, J. Vala, S. Sastry, B. Whaley, "Minimum construction of two qubit quantum operations", *Physical Review Letters*, 2004.

202. Abate, A., Shi, L., Simic, S. N. and Sastry, S. A Stability Criterion for Stochastic Hybrid Systems. Proceedings of the Mathematical Theory of Networks and Systems Conference, Leuven, Belgium, July 2004.
203. Ames, A.D., and Sastry, S. Affine Hybrid Systems. In Hybrid Systems: Computation and Control, LNCS Vol. 2993, pp. 16-31, Springer-Verlag, 2004.
204. Cavusoglu, M.C., Goktekin, T.G., Tendick, F., Sastry, S, "GiPSi: An Open Source/Open Architecture Software Development Framework for Surgical Simulation," In *Proceedings of the 12th Medicine Meets Virtual Reality Conference*, January 2004.
205. Geyer, C., Sastry, S., Bajcsy, R., "Euclid Meets Fourier: Applying Harmonic Analysis to Essential Matrix Estimation in Omnidirectional Cameras.," 2004 *Workshop on Omnidirectional Vision, Camera Networks and Non-classical Cameras*, held in conjunction with the European Conference on Computer Vision, Prague, Czech Republic, May 17, 2004.
206. Jianghai Hu, Wei Chung Wu, and Shankar Sastry, "Modeling Subtilin Production in *Bacillus subtilis* Using Stochastic Hybrid Systems," *The 7th International Workshop on Hybrid Systems: Computation and Control*, Philadelphia, PA, vol. 2993 of Lecture Notes in Computer Science, pp. 417-431, Springer-Verlag, 2004.
207. Oh, S., Kim, H.J., Sastry, S. A Sampling-based Approach to Nonparametric System Identification and Estimation. *Proceedings of the American Control Conference*, Boston, MA, June 2004.
208. Schenato, L., Wu, W.C., Sastry, S. Attitude Control for a Micromechanical Flying Insect via Sensor Output Feedback. *IEEE Transactions on Robotics and Automation*, Vol. 20, No. 1, February 2004, pp.:93-106.
209. Sinopoli, B., Schenato, L., Franceschetti, M., Poolla, K., Jordan, M.I., Sastry, S. Kalman Filtering with Intermittent Observations. *IEEE Transactions on Automatic Control*, September 2004.
210. Sprinkle, J., Shakernia, O., Miller, R., Sastry, S. "Using the Hybrid Systems Interchange Format to Input Design Models to Verification & Validation Tools," *AIAA Conference on Guidance Navigation and Control, Workshop on Validation & Verification*, Aug. 2004,
211. Jianghai Hu, Slobodan Simic and Shankar Sastry, "How should a snake turn on ice: a case study of the asymptotic isoholomic problem", *Proceedings of the IEEE Conference on Decision and Control*, Maui, Hawaii, Dec. 2003, pp. 2908-2913.
212. Antoniadis, A., Kim, H.J., Sastry, S. "Pursuit-Evasion Strategies for Teams of Multiple Agents with Incomplete Information,". *Proc. 42nd IEEE Conference on Decision and Control*, Vol. 1, pp. 756-761, December 2003.
213. Cowan, N., Shakernia, O., Vidal, R., Sastry, S. "Vision-based Follow-the-Leader," *IEEE Conference on Intelligent Robotic Systems*, December 2003.
214. Deng, X., Schenato, L. and Sastry, S. Model Identification and Attitude Control for a Micromechanical Flying Insect Including Thorax and Sensor Models," *Proceedings of the 2003 IEEE International Conference on Robotics & Automation*, Taipei, Taiwan, September 14-19, 2003. Vol. 1: 1152-7.2003

215. Horowitz, B., Liebman, J., Ma, C., Koo, T.J., Sangiovanni-Vincentelli, A., Sastry, S. "Platform-Based Embedded Software Design and System Integration for Autonomous Vehicles", *IEEE Proc.* Vol. 91.(1):198-211. IEEE January 2003.
216. Hu, J. and Sastry, S., "Optimal Sojourn Time Control Within an Interval," *Proc. Amer. Control Conf.* Vol. 4: 3478-83. 2003.
217. Hu, J., Prandini, M. and Sastry, S. Optimal Coordinated Motions for Multiple Agents Moving on a Plane. *SIAM Journal on Control and Optimization.* Vol. 42(2): 637-68. 2003.
218. Kim, H.J., Shim, D.H., Sastry, S. A Flight Control System for Aerial Robots: Algorithms and Experiments. *IFAC Journal of Control Engineering Practice*, Vol. 11, Issue 12, pp. 1389-1400, December 2003.
219. Lygeros, J., Johansson, K.H., Simic, S.N., Zhang J. and Sastry, S. Dynamical Properties of Hybrid Automata. *IEEE Transactions on Automatic Control.* Vol 48(1): 2-17. 2003
220. Ng, A., Kim, H.J., Jordan, V., Sastry, S.. Autonomous Helicopter Flight via Reinforcement Learning. *16th Neural Information Processing Systems (NIPS)*, December 2003.
221. Schenato, L. and Sastry, S. Analysis and Control of Flapping Flight: from Biological to Robotic Insects. Memorandum No. UCB/ERL M04/6. 18 December 2003.
222. Schenato, L., Campolo, D., Sastry, S. Controllability issues in flapping flight for biomimetic Micro Aerial Vehicles (MVs). *Proceedings of the 42nd IEEE Conference on Decision and Control*, Maui, Hawaii, December 2003. Vol 6: 6441-7. 2003
223. Shakernia, O., Vidal, R. and Sastry, S. Multibody Motion Estimation and Segmentation From Multiple Central Panoramic Views. *IEEE International Conference on Robotics and Automation*, Taipei, Taiwan, Sept. 2003. Vol. 1: 571-6. 2003
224. Shakernia, O., Vidal, R., Sastry, S. Omnidirectional vision-based egomotion estimation from backprojection flow. *Proceedings of the CVPR Workshop on Omnidirectional Vision, OMNIVIS'03*, June 2003.
225. Shakernia, O., Vidal, R., Sastry, S. Structure from small baseline motion with central panoramic cameras. *Proceedings of the CVPR Workshop on Omnidirectional Vision, OMNIVIS'03*, June 2003.
226. Shim, D.H., Kim, H.J., Sastry, S. Decentralized Nonlinear Model Predictive Control of Multiple Flying Robots. In Dynamic Environments. *Proc. 42nd IEEE Conference on Decision and Control*, Vol. 4, pp. 3621-3626, December 2003.
227. Simic, S.N. and Sastry, S. Distributed Environmental Monitoring Using Random Wireless Networks. *2nd Intern. Workshop Information Processing in Sensor Networks.* PARC Palo Alto, CA. Proc. Comp. Science Vol 2634: 582-92 Springer Verlag, Berlin, Germany 2003.
228. Sinopoli, B., Schenato, L., Franceschetti, M., Poolla, K., Sastry, S. Kalman Filtering with Intermittent Observations. *Proceedings of the 42nd IEEE Conference on Decision and Control*, Maui, Hawaii, December 2003.
229. Sinopoli, B., Sharp, C., Schenato, L., Schaffert, S. and Sastry, S. Distributed Control Applications Within Sensor Networks. *Proceedings of the IEEE*, Vol. 91, no. 8, pp. 1235-1246, August 2003.

230. Vidal, R. and Sastry, S. Optimal Segmentation of Dynamic Scenes from Two Perspective Views, *IEEE Conference on Computer Vision and Pattern Recognition*, vol. II, pages 281-286, June 2003.
231. Vidal, R., Chiuso, A., Soatto, S. and Sastry, S. Observability of Linear Hybrid Systems. In *Hybrid Systems: Computation and Control*, Lecture Notes in Computer Science 2623, pp. 526-539. Springer Verlag, 2003.
232. Vidal, R., Ma, Y. and Sastry, S. Generalized Principal Component Analysis (GPCA). *IEEE Conference on Computer Vision and Pattern Recognition*, pages 621--628, June 2003.
233. Vidal, R., Shakernia, O. and Sastry, S. Following the Flock: Distributed Formation Control with Omnidirectional Vision Based Motion Segmentation and Visual Servoing. *IEEE Robotics and Automation Magazine*, Volume 11, No. 2, pp. 14-20, Dec 2004.
234. Vidal, R., Shakernia, O. and Sastry, S. Formation Control of Nonholonomic Mobile Robots with Omnidirectional Visual Servoing and Motion Segmentation. *IEEE International Conference on Robotics and Automation*, Taipei, Taiwan, Sept. 2003. Vol. 1: 584-9. 2003
235. Vidal, R., Shakernia, O., Kim, H.J., Shim, H., and Sastry, S. Multi-Agent Probabilistic Pursuit-Evasion games with Unmanned Ground and Aerial Vehicles. *IEEE Trans. On Robotics and Automation*, Number 18, No. 5, October 2002, pp. 662-669/
236. Vidal, R., Soatto, S., and Sastry, S. An Algebraic Geometric Approach to the Identification of Linear Hybrid Systems. *IEEE Conference on Decision and Control*, December 2003.
237. Zelinski, S., Koo, T.J. and Sastry, S. Optimization-based formation reconfigurqtion planning for autonomous vehicles. *IEEE International Conference Robotics and Automation*. IEEE Vol 3: 3758-63. 2003
238. Aubin, J. P., Lygeros, J., Quincampoix, M., Sastry, S. and Seube, N. Impulse Differential Inclusions: a Viability Approach to Hybrid Systems. *IEEE Transactions on Automatic Control*. January 2002. Vol 47(1): 2-20.
239. Cavusoglu, M.C., Goktekin, T., Tendick, F. and Sastry, S. Framework for Open Source Software Development for Organ Simulation in the Digital Human. Intern. Conf. on High Performance Computing (HIPC 2002) Bangalore, India. Dec.. Lecture Notes in Computer Science Vol. 2552: 713-14. Springer Verlag, Berlin, Germany. 2002.
240. Deng, X., Schenato, L., and Sastry S.S. Model Identification and Attitude Control Scheme for a Micromecahnical Flying Insect. *7th Intern. Conf. Control Automation Robotics and Vision. ICARCV*. December 2002 Singapore.
241. Horowitz, B., Liebman, J. Ma, Y., Tal, R., Koo, T.J., Henzinger, T.A. and Sastry, S.S. Hardware-in the-Loop (HIL) Simulation of Multi-Vehicle Multi-Modal Embedded Systems. *IFAC World Congress on Automatic Control*, Barcelona, Spain. July 2002.
242. Hu, J. and Sastry, S. Symmetry Reduction of a Class of Hybrid Systems. *Hybrid Systems: Computation and Control* Lecture Notes in Computer Science. HSCC 2002: 267-280.
243. Hu, J., Prandini, M. and Sastry, S. Optimal Coordinated Maneuvers for Three Dimensional Aircraft Conflict Resolution. *AIAA Journal of Guidance, Control and Dynamics*. 2002. Vol. 25(5):888-900.

244. Kim, H.J., Shim, D.H. and Sastry, S. Flying Robots: Modeling, Control and Decision Making, *Intern. Conf. On Robotics and Automation*, May 2002. Vol 1:66-71.
245. Koo, T.J. and Sastry, S. Bisimulation Based Hierarchical System Architecture for Single-Agent Multi-Modal Systems. *Hybrid Systems: Computation and Control Lecture Notes in Computer Science*. HSCC. 2002: 281-293. Springer Verlag. 2002.
246. Koo, T.J., Ma, Y. and Sastry, S. Nonlinear Control of a Helicopter Base Unmanned Aerial Vehicle Model. *IEEE Transactions on Control Systems Technology*, Jan..2002.
247. Koo, T.J., Pappas, G.J. and Sastry, S. Multi-Modal Control of Constrained Nonlinear Systems. In *Software-Enabled Control: Information Technology for Dynamical Systems*, T. Samd and G. Balas, (Eds.). IEEE Press 2002.
248. Kumar, S. and Sastry, S. Biocomputation. *Computing in Science and Engineering*. Jan-Feb 2002. Vol 4 (1):18-19.
249. Schenato, L., Deng, X. and Sastry, S. Hovering Flight for a Micromnechanical Flying Insect: Modeling and Robust Control Synthesis. *15th IFAC World Congress on Automatic Control*. Baelona, Spain. July 2002.
250. Schenato, L., Wu, W.C., and Sastry, S.S. Attitude Control for a Micromechanical Flying Insect via Sensor Output Feedback. *7th Intern. Conf. Control Automation Robotics and Vision. ICARCV 2002*. Singapore. Vol. 2: 1031-6. 2002
251. Shakernia, O., Vidal, R., Sharp, C. S., Ma, Y. and Sastry, S. Multiple View Motion Estimation and Control for Landing an Unmanned Aerial Vehicle. *IEEE Intern. Conf. On Robotics and Automation*. May 2002, Vol. 3, pp. 2793-2798.
252. Shakernia, R.O., Kim, H.J., Shim, D.H., and Sastry, S. Probabilistic Pursuit-Evasion Games: Theory, Implementation and Experimental Evaluation. *IEEE Trans. Robotics and Automation*. 2002
253. Shim, D.H., Kim, H.J., Chung, H. and Sastry, S. A Flight Control System for Aerial Robots: Algorithms and Experiments. *15th IFAC World Congress on Automatic Control*. July 2002
254. Shim, D.H., Kim, H.J., Chung, H. and Sastry, S. Nonlinear Model Predictive Tracking Control for Rotorcraft-based Unmanned Aerial Vehicles. *Amer. Control Conf.*, Alaska May 2002.
255. Simic, S.N. and Sastry, S. Distributed Gradient Estimation Using Random Sensor Networks. *1st ACM Intern. Workshop on Wireless Sensor Networks and Applications (WSNA)* Atlanta, Georgia, 2002. Memorandum UCB/ERL M02/25. 2002
256. Simic, S.N. and Sastry, S. Distributed Localization in Wireless Ad Hoc Networks. *1st ACM Intern. Workshop on Wireless Sensor Networks and Applications (WSNA)* Atlanta, Georgia, 2002. Memorandum UCB/ERL M02/26.
257. Simic, S.N., Johansson, K.H., Lygeros, J. and Sastry, S. Hybrid Limit Cycles and Hybrid Poincaré-Bendixson. *IFAC World Congress*, Barcelona Spain. July 2002.
258. J. Hu, M. Prandini, and S. Sastry, "Optimal coordinated maneuvers for three dimensional aircraft conflict resolution". *AIAA Journal of Guidance, Control and Dynamics*, vol. 25(5), pp. 888-900, 2002.

259. Aubin, J. P. , Lygeros, J., Quincampoix, M., Sastry, S. and N. Seube. Viability and Invariance Kernels of Impulse Differential Inclusions. Proc. 40th IEEE Conf. On Decision and Control. Vol 2: 1639-1644. Dec. 2001.
260. Cavusoglu, M.C., Tendick, F. and S.Sastry, S. Telesurgery and Surgical Simulation: Haptic Interfaces to Real and Virtual Surgical Environments. In: Mclaughlin, M.L., Hespanha, J.P. and Sukhatme, G. (Eds.) *Touch in Virtual Environments* IMSC Series in Multimedia. Prentice Hall. 2001. Ch 13: 217-238
261. Cavusoglu, M.C., W. Williams, Tendick, F. and S.Sastry, S. Robotics for Telesurgery: Second Generation Berkeley/UCSF Laparoscopic Telesurgical Workstation and Looking Towards Future Applications. Proc. 39th Allerton Conference on Communication, Control and Computing, Oct. 2001 (Invited paper). pp 962-971.
262. Deng, X., Schenato,L. and Sastry, S. Hovering Flight Control of a Micromechanical Flying Insect. Proc. 40th IEEE Conf. on Decision and Control. Vol 1: 235-240. Dec. 2001.
263. Hu, J. and Sastry, S. Optimal Collision Avoidance and Formation Switching on Riemannian Manifolds. Proc. IEEE 40th Conf. On Decision and Control. Vol.2 :1071-1076. Dec. 2001
264. Hu, J., Prandini, M., Johansson, K.H. and Sastry, S. Hybrid Geodesics as Optimal Solutions to the Collision-Free Motion Planning Problem. Proc. 4th Intern. Workshop *Hybrid Systems: Computation and Control*. In: Lecture Notes in Computer Science Vol. 2034:305-318. March 2001.
265. Hu, J., Prandini, M., Nilim, A. and Sastry, S. Optimal Coordinated Maneuvers for Three Dimensional Aircraft Conflict Resolution. *AIAA Guidance, Navigation and Control Conference*, Montreal Canada, Aug 2001. AIAA Paper 2001-4294. August 2001
266. Kim, H.J., Vidal, R., Shim, D.H., Shakernia, O. and Sastry, S. A Hierarchical Approach to Probabilistic Pursuit-Evasion Games With Unmanned Ground and Aerial Vehicles. Proc. 40th IEEE Conf. on Decision and Control. Vol 1: 634-639. Dec. 2001.
267. Koo, T.J., J. Liebman , C. Ma and Sastry, S. Hierarchical Approach for Design of Multi-Vehicle Multi-Modal Embedded Software. *Embedded Software*, T.A. Henzinger and C.M. Kirsch (Eds.). Lecture Notes in Computer Science. Vol. 2211:344-360, 2001.
268. Koo, T.J., Pappas, G.J. and Sastry, S. Mode Switching Synthesis for Reachability Specifications.Proc. 4th Intern. Workshop *Hybrid Systems: Computation and Control*. in: Lecture Notes in Computer Science. Vol. 2034: 333-346. March 2001.
269. Koo, T.J., Pappas, G.J. and Sastry, S. Multi-Modal Control of Systems with Constraints. Proc. 40th IEEE Conf. on Decision and Control. Vol 3: 2075-2080. Dec. 2001.
270. Lemch, E.S., Sastry, S. and P.E. Cairns. Global Controllability of Hybrid Systems with Controlled and Autonomous Switchings. 4th Intern. Workshop *Hybrid Systems: Computation and Control*. in: Lecture Notes in Computer Science. Vol. 2034: 375-386. March 2001.
271. Lygeros,J., Johansson, K.H., S.N. Simic, Zhang, J. and Sastry, S. Continuity and Invariance in Hybrid Automata. Proc. 40th IEEE Conf. on Decision and Control. Vol 1: 340-345.2001.

272. J. Hu, M. Prandini and **S. Sastry** Optimal Coordinated Motions of Multiple Agents moving in a plane, *SIAM Journal of Control and Optimization*, Vol. 42. No. 2, pp. 637-668, 2003.
273. Ma, Y., Kosecka, J. and Sastry, S. Optimization Criteria and Geometric Algorithms for Motion and Structure Estimation. *Intern. J. Computer Vision*: Vol 44 (3):219-249 Sept-Oct 2001.
274. Ma, Y., Vidal, R., S. Hsu and Sastry, S. Optimal Motion Estimation from Multiple Images by Normalized Epipolar Constraint. *Communications in Information and Systems*. Vol 1(1):51-74. January 2001.
275. Sastry, S. Control of Networks of Unmanned Vehicles. *Proc. Concur 2001 – Concurrency Theory*. In:Lecture Notes in Computer Science Vol 2154:36 August 2001.
276. Schenato, L., X. Deng and Sastry, S. Flight Control System for a Micromechanical Flying Insect. *Proc. IEEE Intern. Conf. on Robotics and Automation*. Vol 2:1641-1646. May 2001.
277. Schenato, L., X. Deng, W.C. Wu and Sastry, S. Virtual Insect Flight Simulator(VIFS): a Software Testbed for Insect Flight. *Proc. IEEE Intern. Conf. on Robotics and Automation*. Vol 4:3885-3892. May 2001.
278. Shakernia, O., Pappas, G.J. and Sastry, S. Semi-decidable Synthesis for Triangular Hybrid Systems. 4th Intern. Workshop Hybrid Systems: Computation and Control. in: Lecture Notes in Computer Science. Vol. 2034:487-500. March 2001.
279. Sharp, C.S., Shakernia, O. and S. Sastry, S. A Vision System for Landing an Unmanned Aerial Vehicle. *Proc. IEEE Intern. Conf. on Robotics and Automation*. Vol 2:1720-1727. May 2001.
280. Shim, D.H., H. J. Kim, H. Chung and Sastry, S. Multi-Functional Autopilot Design and Experiments for Rotorcraft-Based Unmanned Aerial Vehicles. *IEEE Proc. Digital Avionics Systems Conference*. Vol 1 2001 pp 3C41-3C48. April 2001.
281. Simic, S.N., Johansson, K.H., Lygeros, J. and Sastry, S. Structural Stability of Hybrid Systems. *European Control Conference (ECC)*, Porto Portugal 2001.
282. Vidal, R., Ma, Y., S. Hsu and Sastry, S. Optimal Motion Estimation from Multiview Normalized Epipolar Constraint. *Proc. 8th IEEE Intern. Conf. on Computer Vision*. Vol.1:34-41. July 2001.
283. Vidal, R., Rashid, S., C. Sharp, Shakernia, O., J. Kim and Sastry, S. Pursuit-Evasion Games with Unmanned Ground and Aerial Vehicles. *Proc. IEEE Intern. Conf. On Robotics and Automation*. Vol 3:2984-2955. May 2001.
284. Vidal, R., Schaffert, S., Shakernia, O., Lygeros, J. and Sastry, S. Decidable and Semi-Decidable Controller Synthesis for Classes of Discrete Time Hybrid Systems. *IEEE Proc. Of 40th Conf. on Decision and Control*. Vol 2:1243-1248. Dec. 2001.
285. Zhang, J. and Sastry, S. Aircraft Conflict Resolution: Lie-Poisson Reduction for Game on $SE(2)$. *Proc. 40th IEEE Conf. On Decision and Control*. Vol 2: 1663-1668. Dec. 2001.
286. Zhang, J., Johansson, K.H., Lygeros, J. and Sastry, S. Zeno Hybrid Systems. *Intern. J. Robust and Nonlinear Control*. Vol. 11 (5): 435-451. April 2001.

287. Hespanha, J.P., Prandini, M. and Sastry, S. Probabilistic Pursuit-Evasion Games: a One-Step Nash Approach. *Proc. IEEE 39th Conf. On Decision and Control*. Vol. 3:2272-2277. Dec. 2000.
288. Hu, J., Lygeros, J. and Sastry, S. Towards Stochastic Hybrid System. *Hybrid Systems Computation and Control (HSCC) 2000*: 160-173.
289. Hu, J., Prandini, M. and Sastry, S. Optimal Maneuver for Multiple Aircraft Conflict Resolution: A Braid Point of View. *Proc. IEEE 39th Conf. On Decision and Control*. Vol. 4: 4164-4169. Dec. 2000.
290. Johansson, K.H., Lygeros, J. Zhang, J. and Sastry, S. Hybrid Automata: a Formal Paradigm for Heterogeneous Modeling. *Proc. IEEE Intern. Symposium on Computer-Aided Control System Design*. 123-128. Sept. 2000.
291. Kim, H.J., Shim, D.H., Rashid, S. and Sastry, S. Hierarchical Systems for Multi-Agent Systems. *Proceedings of the IEEE. Conf. on Decisions and Control*. Sydney, 2000
292. Kosecka, J., Ma, Y. and Sastry, S. Optimization Criteria, Sensitivity and Robustness of Motion and Structure Estimation. In: *Vision Algorithms: Theory and Practice*, Triggs, Zisserman, Szeliski and Berlin (Eds.) Springer Verlag Lecture Notes in Computer Science, Vol. 1883, pp. 166-182. 2000,.
293. Lafferriere, G., Pappas, G.J. and Sastry, S. O-minimal Hybrid Systems. *Mathematics of Control, Signals, and Systems*. Vol. 13 (1): 1-21. March 2000.
294. Lemch, E.S., Sastry, S. and Caines, P.E. . On the Global Controllability of Hybrid Systems: Hybrifolds and Fountains. *Proc. IEEE 39th Conf. On Decision and Control*. Vol. 1:981-986. Dec. 2000.
295. Ma, Y., Kosecka, J. and Sastry, S. Linear Differential Algorithm for Motion Recovery: A Geometric Approach. *International Journal of Computer Vision*, Vol 36 (1):71-89. Jan 2000.
296. Ma, Y., Soatto, S., Kosecka, J. and Sastry, S. "Euclidean Reconstruction and Reprojection Up to Subgroups. *Intern. J. Computer Vision*. Vol 38 (3):219-229. July 2000.
297. Ma, Y., Vidal, R., Kosecka, J. and Sastry, S. Kruppa Equation Revisited: its Renormalization and Degeneracy. *ECCV (2)::561-577*. 2000.
298. Pappas, G.J., Lafferriere, G. and Sastry, S. Hierarchically Consistent Control Systems. *IEEE Transactions on Automatic Control*, Vol 45(6):1144-1160. June 2000.
299. Prandini, M., Hu, J., Lygeros, J. and Sastry, S. A Probabilistic Approach to Aircraft Conflict Detection. *IEEE Transactions on Intelligent Transportation Systems*. Vol 1(4):199-220. Dec. 2000.
300. Shakernia, O., Pappas, G.J. and Sastry, S. Semidecidable Controller Synthesis for Classes of Linear Hybrid Systems. *Proc. IEEE 39th Conf. on Decision and Control*. Vol. 2:1834-1839. Dec. 2000.
301. Shakernia, O., Sastry, S. and Pappas, G. Decidable Controller Synthesis for Classes of Linear Systems. *HSCC*:407-420. 2000.
302. Shim, D.H., Kim, H.J. and Sastry, S. Control System Design for Rotorcraft-Based Unmanned Aerial Vehicles Using Time-Domain System Identification. *Proc. IEEE Intern. Conf on Control Applications*. Anchorage, AK Vol 1 2000: 808-813. Sept. 2000.

303. Shim, D.H., Kim, H.J. and Sastry, S. Hierarchical Control System Synthesis for Rotorcraft-based Unmanned Aerial Vehicles. *AIAA Guidance, Navigation and Control Conf.* Denver, August 2000.
304. Shim, D.H., Kim, H.J. and Sastry, S. System Identification and Control Synthesis for Rotorcraft-Based Unmanned Aerial Vehicles. *IEEE Intern. Conf on Control Applications.* Anchorage, AK Sept. 2000.
305. Simic, S.N., Johansson, K.H., Sastry, S. and Lygeros, J. Towards a Geometric Theory of Hybrid Systems. *Hybrid Systems: Computation and Control.* 3rd International Workshop, Pittsburgh, PA, March. Lecture Notes in Computer Science, HSCC 2000: 421-436. Vol. 1790, Springer-Verlag, 2000.
306. Tomlin, C.J. , Lygeros, J. and Sastry, S. A Game Theoretic Approach to Controller Design for Hybrid Systems. *Proc. IEEE.* Vol 88 (7): 949-970. July 2000.
307. Vidal, R, Shakernia, O. and Sastry, S. Controlled Invariance of Discrete Time Systems by Robust Semidefinite Programming. *The 39th IEEE Conference on Decision and Control.* Sydney, Australia, December 2000. pp. 1834-1839.
308. Vidal, R., Schaffert, S., Lygeros, J. and Sastry, S. Controlled Invariance of Discrete Time Systems. *Hybrid Systems: Computation and Control.* Lecture notes in Computer Science. Springer. 2000 Vol. 1790 :437-450.
309. Zhang, J., Johansson, K.H., Sastry, S. and Lygeros, J. Dynamical Systems Revisited: Hybrid Systems with Zeno Executions. *Hybrid Systems: Computation and Control*, Lecture Notes in Computer Science. HSCC 2000:451-464. B. Krogh and N. Lynch, (Eds.). Springer-Verlag, 2000.
310. Antsaklis, P., Kohn, W., Nerode, A. and Sastry, S. (Eds.). *Hybrid Systems V.* Lecture Notes in Computer Science. Springer Verlag, July 1999.
311. Cavusoglu, M.C., Tendick, F., Cohn, M. and Sastry, S. A Laparoscopic Telesurgical Workstation, *IEEE Transactions on Robotics and Automation.* Vol 15(4): 728-739. Aug. 1999.
312. Cavusoglu, M.C., Tendick, F., Cohn, M. and Sastry, S. A Laparoscopic Telesurgical Workstation. *IEEE Transactions on Automation and Control.* Vol. 15 (6):1146-1160. Dec. 1999.
313. Egerstedt, M., Johansson, K., Lygeros, J. and Sastry, S. Behavior-Based Robotics Using Regularized Hybrid Automata. *Proceedings of the 38th Conference on Decision and Control*, Dec. 1999, Vol. 4: 3400-5.
314. Egerstedt, M., Koo, T.J., Hoffmann, F.G. and Sastry, S. An Integrated Algorithm for Path Planning and Flight Controller Scheduling for Autonomous Helicopters. *7th IEEE Mediterranean Conf. on Control and Automation*, Haifa, Israel, June 1999.
315. Egerstedt, M., Koo, T.J., Hoffmann, F.G. and Sastry, S. Path Planning and Flight Controller Scheduling for an Autonomous Helicopter. *Hybrid Systems: Computation and Control.* F.W. Vaandrager and J.H. van Schuppen (Eds.). Lecture Notes in Computer Science. Vol. 1569: 91-102. 1999.
316. Godhavn, J.M., Balluchi, A., Crawford, L.S., Sastry, S. "Steering of a class of nonholonomic systems with drift terms", *Automatica*, , May, Vol.35 (5):837-847. 1999

317. Hespanha, J.P.; Kim;H. J., Sastry, S. Multiple-Agent Probabilistic Pursuit-Evasion Games. *Proceedings of the 38th IEEE Conference on Decision and Control*, Phoenix, Arizona, Dec. 2432-37. 1999
318. Hu, J., Lygeros, J. Prandini, M. and Sastry, S. Aircraft Conflict Prediction and Resolution Using Brownian Motion. *Proceedings of the 38th IEEE Conference on Decision and Control*, Phoenix, Arizona, Dec.: 2438-2443. 1999
319. Hu, J., Lygeros, J. Prandini, M. and Sastry, S., A Probabilistic Framework for Highway Safety Analysis. *Proceedings from 38th Conference on Decision and Control*. Vol 4: 3734-3739. Dec. 1999.
320. Johansson, K.H., Egerstedt, M. ; Lygeros, J. and Sastry, S., On the Regularization of Zeno Hybrid Automata, *Systems & Control Letters*, 26 Oct. 1999, Vol. 38 (3):141-50.
321. Johansson, K.H., Lygeros, J. Sastry, S. and Egerstedt, M. . Simulation of Zeno Hybrid Automata. *Proceedings of the 38th Conference on Decision and Control*, Dec. 1999 (4): 3538-3543.
322. Koo, T.J. and Sastry, S. UAV Trajectory Generation with Switching on Flat Outputs. *IEEE Hong Kong Symposium on Robotics and Control*, Hong Kong, June 1999
323. Koo, T.J. and Sastry, S., Differential Flatness-Based Full Authority Helicopter Control Design. *Proceedings of the 38th IEEE Conference on Decision and Control*,: 1982-87. Dec 1999.
324. Koo, T.J., Hoffmann, F., Shim, H., Sinopoli, B. and Sastry, S. Hybrid Control of an automated helicopter. Motion Cotnrol. *Proc. IFAC Workshop*. Elsevier Sci. 265-70. 1999.
325. Koo, T.J.; Sinopoli, B.; Sangiovanni-Vincentelli; A. and Sastry, S. A Formal Approach to Reactive System Design: Unmanned Aerial Vehicle Flight Management System Design Example. *Proceedings of the 1999 IEEE International Symposium on Computer Aided Control System Design*, August: 522-27. 1999.
326. Kosecka, J., Ma, Y. and Sastry, S. Multiview Geomtery Revisited: A Differential Geometric Approach. Workshop on Multiview Modeling and Analysis of Visual Scenes. *IEEE Conf. On Computer Vision and Pattern Recognition*. 1999.
327. Kosecka, J., Ma, Y. and Sastry, S. Optimization Criteria, Sensitivity and Robustness of Motion and Structure Estimation. *Proceedings from ICCV Workshop on Vision Algorithms*, Lecture Notes in Computer Science. Vol. 1883:166-182, Sept. 1999.
328. Lafferriere, G., Pappas, G.J. and Sastry, S. A New Class of Decidable Hybrid Systems. In: *Hybrid Systems: Computation and Control*. Lecture Notes in Computer Science. March 1999.
329. Lafferriere, G., Pappas, G.J. and Sastry, S. Hybrid Systems with Finite Bisimulations. *Hybrid Systems V*, Lecture Notes in Computer Science, Vol. 1567, Springer-Verlag, 1999.
330. Liu, J., Liu, X., Koo, T.J., Sinopoli,B. Sastry, S. and E. Lee. A Hierarchical Hybrid System Model and its Simulation. *Proceedings of the 38th Conference on Decision and Control*, Dec., Vol. 4: 3508-13. 1999.

331. Lygeros, J. Johansson, K.H., Sastry, S. and Egerstedt, M. . On the Existence of Executions of Hybrid Automata. *Proceedings of the 38th IEEE Conference on Decision and Control*, Dec. 2249-2254. 1999
332. Lygeros, J. Pappas, G.J. and Sastry, S. An Introduction to Hybrid System Modeling, Analysis, and Control. *First Nonlinear Control Network Pedagogical School*, Athens, Greece, Sept.: 307-329. 1999.
333. Lygeros, J. Pappas, G.J. and Sastry, S. Large Scale Systems Issues in Automated Highway and Air Traffic Management Systems. In Large Scale Systems: Theory and Applications 1998 (LSS'98). *Proceedings of the 8th IFAC/IFORS/IMAC/IFIP Symposium*. Vol. 2, pp. 701-706, 1999.
334. Lygeros, J.; Tomlin, C. and Sastry, S. Controllers for reachability specifications for hybrid systems, *Automatica*, Mar., Vol.35 (3): 349-370. 1999
335. Ma, Y., Kosecka, J. and Sastry, S. A Differential Geometric Approach to Camera Self-Calibration. *International Conference on Computer Vision.(ICCV)* 1999.
336. Ma, Y., Kosecka, J. and Sastry, S. Vision guided navigation for a nonholonomic mobile robot. *IEEE Trans. Robotics and Automation.*, June, Vol 15(3): 521-536. 1999
337. Ma, Y., Shakernia, O., Kosecka, J. and Sastry, S. A Lie Theoretic Approach to Structure and Motion in Computer Vision. *Proc. 14th World Conf. of Intern. Federation of Automatic Control (IFAC)*, July 1999.
338. Ma, Y., Soatto, S., Kosecka, J. and Sastry, S. Euclidean Reconstruction and Reprojection up to Subgroups. *Proceedings of the 7th IEEE International Conference on Computer Vision*, Kerkyra, Greece, Sept., Vol. 2: 773-80. 1999.
339. Prandini, M., Lygeros, J. Nilim, A. and Sastry, S. A Probabilistic Framework for Aircraft Conflict Detection. *Proceedings of the AIAA Guidance, Navigation and Control Conference*, Portland, Oregon, August 1999.
340. Prandini, M., Lygeros, J. Nilim, A. and Sastry, S. Randomized Algorithms for Probabilistic Aircraft Conflict Detection. *Proceedings from 38th Conference on Decision and Control*, Phoenix, Arizona, Dec. 1999, pp. 2444-49.
341. Sastry, S. *Nonlinear Systems: Analysis, Stability and Control.*, Lecture Notes in Interdisciplinary and Applied Mathematics. (book). Springer Verlag Vol 10. 1999.
342. Sekhavat, S. and Sastry, S., Towards An Automatic Air Traffic Controller, in *Evolutionary Computing for Knowledge Acquisition and Information Retrieval*, Vol. 55: 142-147. 1999.
343. Shakernia, O. Ma, Y., Koo, T.J. and Sastry, S. Landing an Unmanned Air Vehicle: Vision Based Motion Estimation and Nonlinear Control. *Asian J. of Control* Vol 1(3):128-145. Sept. 1999.
344. Shakernia, O., Ma, Y., Koo, T.J., Hespanha, J. and Sastry, S. Vision Guided Landing of an Unmanned Air Vehicle. *Proceedings of the 38th Conference on Decision and Control*, Dec., Vol. 4: 4143-4148. 1999.
345. Tomlin, C., Lygeros, J. and Sastry, S. Computing Controllers for Nonlinear Hybrid Systems. In *Hybrid Systems: Computation and Control*. *HSCC*.1999:238-255.1999.

346. Tomlin, C., Lygeros, J. and Sastry, S. Computation of Controllers for Nonlinear Hybrid Systems. In *Proceedings of the 14th World Congress. International Federation of Automatic Control*. Vol. 6: 19-24. 1999.
347. Tomlin, C.J., Lygeros, J., and Sastry, S. Controller Synthesis for Hybrid Systems: the Hamilton-Jacobi Approach. Hybrid Systems and AI: Modeling Analysis and Control of Discrete Plus Continuous Systems. In *AAAI Symposium (TR SS-99-05)*, pp. 192-197, 1999.
348. Cavusoglu, M.C., Cohn, M., Tendick, F. and Sastry, S. Laparoscopic Telesurgical Workstation, *Proceedings of the SPIE International Symposium on Biological Optics (BIOS '98)*, San Jose, CA, January 24-30, 1998.
349. Henzinger, T. and Sastry, S. (Eds.). *Hybrid Systems: Computation and Control: First Intern. Workshop. HSCC '98*, Berkeley, CA. Proceedings. April 13-15, 1998. New York, Springer-Verlag. 1998.
350. Koo, T.J. and Sastry, S. Output tracking control design of a helicopter model based on approximate linearization. *Proc. 37th IEEE Conf. Decision and Control*, Vol 4: 3635-40. 1998.
351. Lafferriere, G., Pappas, G. and Sastry, S. Subanalytic Stratifications and Bisimulations, *Hybrid Systems: Computation and Control*, Lecture Notes in Computer Science, Vol. 1386. T. Henzinger and Sastry, S. (Eds.) New York, Springer-Verlag, April 1998.
352. Lygeros, J. Godbole, D. and Sastry, S. A Verified Hybrid Controller for Automated Vehicles, *Proceedings of the 35th IEEE Conference on Decision and Control*, Kobe, Japan, Vol. 2, pp. 2289-2294, December 11-13, 1996. Also in *IEEE Transactions on Automatic Control, Special Issue in Hybrid Systems*, Vol. 43, No. 4, pp. 522-539, April 1998.
353. Lygeros, J. Pappas, G.J. and Sastry, S. An approach to the verification of the Center-TRACON automations system. *Hybrid Systems: Computation and Control First intern. Workshop. HSCC '98 Proc.* Springer Verlag. Pp289-304. Berlin, Germany, 1998.
354. Lygeros, J.; Tomlin, C. and Sastry, S. On Controlling Synthesis for Nonlinear Hybrid Systems. In *Proc. of the 37th IEEE Conference on Decision and Control* Vol. 2: 2101-2106, 1998.
355. Pappas, G. and Sastry, S. Straightening Rectangular Inclusions, *Systems and Control Letters*, Vol. 35 (2):, pg. 79-85. 1998.
356. Shim, H., Koo, T.J., Hoffmann, F. and Sastry, S. A comprehensive study of control design for an autonomous helicopter. *Proc. 37th IEEE Conf. Decision and Control*. IEEE. Vol 4: 3653-8. 1998
357. Tendick, F., Fearing, R., Cohn, M. and Sastry, S. Applications of Micro-Mechanical Systems in Minimally Invasive Surgery, *IEEE/ASME Transactions on Mechatronics*, Vol. 3 (1): 34-42, March 1998.
358. Tomlin, C. and Sastry, S. Switching through Singularities, *Proceedings of the 36th IEEE Conference on Decision and Control*, San Diego, CA, pp. 1-6, December 1997, also in *Systems and Control Letters*, Vol38: 145-154. 1998.
359. Tomlin, C., Lygeros, J. and Sastry, S. Aerodynamic Envelope Protection Using Hybrid Control, *Proceedings of the 1998 American Control Conference*, Philadelphia, PA, June. Vol 3:1793-1796. 1998.

360. Tomlin, C., Lygeros, J. and Sastry, S. Synthesizing Controllers for Nonlinear Hybrid Systems, *Hybrid Systems: Computation and Control*, Lecture Notes in Computer Science, Vol. 1386. Editors: T. Henzinger and Sastry, S., New York, Springer-Verlag, April 1998.
361. Tomlin, C., Pappas, G. and Sastry, S. Conflict Resolution for Air traffic Management:: A Study in Multi Agent Hybrid Systems. *IEEE Transactions in Automatic Control*, April 1998. Vol 43(4):509-521. 1998.
362. Tomlin, C., Pappas, G. and Sastry, S. Conflict Resolution in Multi-Agent Hybrid Systems, *Proceedings of the 35th IEEE Conference on Decision and Control*, Kobe, Japan, Vol. 2, pp. 1184-1189, December 11-13, 1996. In: *IEEE Transactions on Automatic Control, Special Issue in Hybrid Systems*, Vol. 43, No. 4, pp. 509-521, April 1998.
363. Tomlin, C., Pappas, G., Kosecka, J., Lygeros, J. and Sastry, S. Advanced air traffic automation: a case study in distributed decentralized control, *Control Problems in Robotics and Automation*, San Diego, CA, December 1997. Edited by B. Siciliano and K.P. Valavanis, Berlin, Germany, Springer-Verlag, pp. 261-295, 1998.
364. Cavusoglu, M.C., Yan, J. and Sastry, S. A Hybrid System Approach to Contact Stability and Force Control in Robotic Manipulators, *Proceedings of the 1997 IEEE International Symposium on Intelligent Control*, Istanbul, Turkey, July 16-18, 1997:pp 143-148. 1997.
365. Kosecka, J., Tomlin, C., Pappas, G. and Sastry, S. Generation of conflict resolution maneuvers for air traffic management, *Proceedings of the 1997 IEEE/RSJ International Conference on Intelligent Robotics and Systems*, IROS '97 Grenoble, France, pp. 1598-1603, September 1997.
366. Lygeros, J. Godbole, D.N. and Sastry, S. Hybrid Controller Design for Multi-Agent Systems, *Control Using Logic-Based Switching*, Block Island, RI, Fall 1995. Edited by: A.S. Morse, London, England, Springer-Verlag, pp. 59-78, 1997.
367. Lygeros, J. Tomlin, C. and Sastry, S. Multi-Objective Hybrid Controller Synthesis: Least Restrictive Controls, *Proceedings of the 36 th IEEE Conference on Decision and Control*, San Diego, CA, pp. 127-132, December 1997.
368. Lygeros, J. Tomlin, C. and Sastry, S. Multiobjective Hybrid Controller Synthesis, in Hybrid and Real-Time Systems. International Workshop, *HART '97 Proceedings*, Grenoble, France, March 26-28, 1997. Edited by: O. Maler, Berlin, Germany, Springer-Verlag, pp. 109-123, 1997.
369. Ma, Y., Kosecka, J. and Sastry, S. Vision Guided Navigation for a Nonholonomic Mobile Robot, *Proceedings of the 36 th IEEE Conference on Decision and Control*, San Diego, CA, pp. 3069-3074, December 1997.
370. Pappas, G. and Sastry, S. Towards Continuous Abstractions of Dynamical and Control Systems. In: *Hybrid Systems IV: Proc. Of Hybrid Systems '96*: 4th Intern. Conf., Ithaca, NY. Antsaklis, Kohn, Nerode, Sastry, (eds). Berlin, Germany. Springer Verlag. Pp 329-341. 1997.
371. Pappas, G., Tomlin, C., Lygeros, J. Kosecka, J. and Sastry, S. A next generation architecture for air traffic management systems, *Proceedings of the 36 th IEEE Conference on Decision and Control*, San Diego, CA, pp. 2405-2410, December 1997.

372. Pappas, G.J. and Sastry, S. Towards Continuous Abstractions of Dynamical and Control Systems, *Hybrid Systems IV*, Ithaca, NY, October 12-14, 1996. Edited by: Antsaklis, P., Kohn, W., A. Nerode and Sastry, S., Berlin, Germany, Springer-Verlag, pp. 329-41, 1997.
373. Sastry, S. Hybrid Control Issues in Air Traffic Management Systems, in *Hybrid and Real-Time Systems. International Workshop, HART '97 Proceedings*, Grenoble, France, March 26-28, 1997. Edited by O. Maler, Berlin, Germany, Springer-Verlag, p.108, 1997.
374. Sastry, S., Cohn, M.B. and Tendick, F. Millirobotics for Remote, Minimally Invasive Surgery, *Proceedings of International Symposium on Intelligent Robotics (ISIR)*, Singapore, October 1995, also in *Journal of Robotics and Autonomous Systems*, pp. 305-316, 1997.
375. Sastry, S. and Full, R. NSF Report: Analysis, Control and Adaptation of Dynamical Systems in Biology, 1996-97.
376. Tomlin, C. and Sastry, S. Bounded Tracking for Nonminimum Phase Nonlinear Systems With Fast Zero Dynamics, *Proceedings of the 35th IEEE Conference on Decision and Control*, Kobe, Japan, Vol. 2: 2058-2063, December 11-13, 1996. New York, NY, IEEE, 1996. In: *International Journal of Control*, Vol. 68, No. 4, pp. 819-847, November 1997.
377. Tomlin, C., Pappas, G. and Sastry, S. Non-cooperative conflict resolution for air traffic management, *Proceedings of the 36th IEEE Conference on Decision and Control*, San Diego, CA, pp. 1816-1821, December 1997.
378. Tomlin, C., Pappas, G., Lygeros, J. Godbole, D. and Sastry, S. Hybrid Control Models of Next Generation Air Traffic Management, *Hybrid Systems IV*, Ithaca, NY, October 12-14, 1996. Edited by: Antsaklis, P., Kohn, W., A. Nerode and Sastry, S., Berlin, Germany, Springer-Verlag, pp. 378-404, 1997.
379. Tomlin, C., Pappas, G., Lygeros, J. Godbole, D. and Sastry, S. Hybrid control in air traffic management systems. *Proc. 13th World Conf. Intern. Fed. Automatic control* Vol. L. Systems Engineering and Management. Pergamon. Pp 127-32. 1997.
380. Lygeros, J. Godbole, D. and Sastry, S. A Game-Theoretic Approach to Hybrid System Design, *Hybrid Systems III. Verification and Control*, New Brunswick, NJ, October 22-25, 1995. Edited by: R. Alur, T.A. Henzinger, E.D. Sontag, Berlin, Germany, Springer-Verlag, pp. 1-12, 1996.
381. Lygeros, J. Godbole, D. and Sastry, S. Optimal Control Approach to Multiagent, Hierarchical System Verification, *IFAC World Congress. Vol. J:389-394*. 1996.
382. Lygeros, J. Godbole, D. and Sastry, S. Multiagent hybrid system design using game theory and optimal control. *Proc. 35th IEEE Conf. on Decision and Control*. IEEE Vol. 2:1190-5. 1996
383. Lygeros, J., Godbole, D.N. and Sastry, S. Multi-Agent Hybrid System Design Using Game Theory and Optimal Control, *Proceedings of the 35th IEEE Conference on Decision and Control*, Kobe, Japan, Vol. 2, pp. 1190-1195, December 11-13, 1996. New York, NY, IEEE, 1996.
384. Pappas, G., Tomlin, C. and Sastry, S. Conflict Resolution in Multi-Agent Hybrid Systems, *Proceedings of the 35th IEEE Conference on Decision and Control*, Kobe, Japan, Vol. 2, pp. 1184-1189, December 11-13, 1996.

385. Wendlandt, J.M. and Sastry, S. Recursive Workspace Control of Multibody Systems: A Planar Biped Example, *Proceedings of the 35 th IEEE Conference on Decision and Control*, Kobe, Japan, Vol. 3: 3575-3580, December 11-13, 1996. New York, NY, IEEE, 1996.
386. Antsaklis, P., Kohn, W., Nerode, A. and Sastry, S. (Eds.). Hybrid Systems II, (book), Lecture Notes on Computer Science, Vol. 999, Springer-Verlag, 1995.
387. Bicchi, A., Prattichizzo, D. and Sastry, S. Planning Motions of Rolling Surfaces, *Proceedings of the 34th IEEE Conference on Decision and Control*, New Orleans, LA, Dec. 13-15 1995. IEEE 1995: Vol. 3: 2812-2817.
388. Burgett, S., Bush, R.T., Sastry, S.S. and Sequin, C. Mechanical Design Synthesis from Sparse, Feature Based Data. *Proceedings of SPIE V2442*, pp 280-291. 1995.
389. Burgett, S.R., Bush, R.T., Sastry, S.S. and Sequin, C.H. Shape synthesis from sparse, feature-based input. *Proc. Product and Porcess Engineering Am. Soc. Mech. Eng., Manufacturing Eng. Div.*, Med vol 1 1995. ASME new York pp 307-318. 1995
390. Bushnell, G., Tilbury, D.M. and Sastry, S. Steering Three-Input Nonholonomic Systems - The Firetruck Example, *International Journal of Robotics Research*, Vol. 14 (4): 366-381, August 1995.
391. Cohn, M., Crawford, L. Wendlandt, J. and Sastry, S. Surgical Applications of Milli-Robots, *Journal of Robotic Systems*, Vol. 12 (6): 401-416, June 1995.
392. Godbole, D. and Sastry, S. Approximate Decoupling and Asymptotic Tracking for MIMO Systems, *IEEE Transactions on Automatic Control*, Vol. 40: 441-450, March 1995.
393. Godbole, D., Lygeros, J. and Sastry, S. Hierarchical Hybrid Control: a Case Study. In *Hybrid Systems II*, pp. 166-190, 1995.
394. Sastry, S. , Meyer, G., Tomlin, C., Lygeros, J., Godbole, D. and Pappas, G. Hybrid control in air traffic management systems. *Proc. 34th IEEE Conf. on Decision and Control*. IEEE Vol 2: 1478-83. 1995.
395. Tilbury, D. and Sastry, S. The Multi-Steering N-Trailer System: A Case Study of Goursat Normal Forms and Prolongations, *International Journal of Robust and Nonlinear Control*, Vol. 5 (4): 343-364, July 1995.
396. J. Lygeros, D. Godbole, and S. Sastry, "Verified Hybrid Controllers for automated vehicles", *IEEE Transactions on Automatic Control*, Vol. 43, No. 4, pp. 522-539, 1998/
397. Tilbury, D., Murray, R. and Sastry, S. Trajectory Generation for the N-Trailer Problem Using Goursat Normal Form, *IEEE Transactions On Automatic Control*, Vol. 40: 802-819, May 1995.
398. Tilbury, D., Sordalen, O.J., Bushnell, L. and Sastry, S.S. A Multisteering Trailer System: Conversion into Chained Form Using Dynamic Feedback, *IEEE Transactions on Robotics and Automation*, Vol 11(6): 807-818. 1995.
399. Tomlin, C., Lygeros, J., Benvenuti, L. and Sastry, S. Output Tracking for a Non-Minimum Phase Dynamic CTOL Aircraft Model, *Proceedings of the 34th IEEE Conference on Decision and Control*, Vol. 2: 1867-1872. 1995.

400. Walsh, G. and Sastry, S. On Reorienting Linked Rigid Bodies Using Internal Motions, *IEEE Transactions on Robotics and Automation*, Vol. 11: 139-146, February 1995.
401. Godbole, D., Lygeros, J. and Sastry, S. Hierarchical Hybrid Control: An IVHS Case Study, *Proceedings of the 1994 33rd IEEE Conference on Decision and Control*, Lake Buena Vista, FL, Vol. 2: 1592-1597, December 1994.
402. Lygeros, J. Godbole, D. and Sastry, S. Simulation as a Tool for Hybrid System Design, *Proceedings of the Fifth Annual Conference on AI, Simulation, and Planning in High Autonomy Systems. Distributed Interactive Simulation Environments*. IEEE Comput. Soc. Press, pp. 16-22.1994.
403. Murray, R., Li, Z. and Sastry, S. A Mathematical Introduction to Robotic Manipulation, (book) CRC Press, Boca Raton, FL, 1994.
404. Tilbury, D. and Sastry, S. On Goursat Normal Forms, Prolongations, and Control Systems, *Proceedings of the 1994 33rd IEEE Conference on Decision and Control*, Lake Buena Vista, FL, Vol. 2: 1797-1802, December 1994.
405. Walsh, G., Montgomery, R. and Sastry, S. Optimal Path Planning on Matrix Lie Groups, *Proceedings of the 1994 33rd IEEE Conference on Decision and Control*, Lake Buena Vista, FL, Vol. 2: 1258-1263, December 1994.
406. Walsh, G., Montgomery, R. and Sastry, S. Orientation Control of the Dynamic Satellite, *Proceedings of the 1994 American Control Conference*, Baltimore, MD, pp. 135-142, June 1994.
407. Walsh, G., Tilbury, D., Sastry, S., Murray, R. and Laumond, J-P. Stabilization of Trajectories for Systems with Nonholonomic Constraints, *IEEE Transactions on Automatic Control*, Vol. 39 (1): 216-222, January 1994.
408. Wendlandt, J. and Sastry, S. Design and Control of a Simplified Stewart Platform For Endoscopy, *Proceedings of the 1994 33rd IEEE Conference on Decision and Control*, Lake Buena Vista, FL, Vol. 2: 357-362, December 1994.
409. Bushnell, L.G., Tilbury, D. and Sastry, S. Extended Goursat Normal Forms with Applications to Nonholonomic Motion Planning, *Proceedings of the 1993 IEEE Conference on Decision and Control*, San Antonio, Texas, pp. 3447-3452, December. 1993
410. Bushnell, L.G., Tilbury, D. and Sastry, S. Steering Three Input Chained Form Nonholonomic Systems: The Fire Truck Example, *Proceedings of the 1993 European Control Conference*, Groningen, the Netherlands, pp. 1432-1437, July 1993.
411. Di Benedetto, M. and Sastry, S. Adaptive Control for MIMO Nonlinear Systems, *Journal of Mathematical Systems, Estimation and Control*, Vol. 3 (1):73-105. 1993.
412. Getz, N. and Sastry, S. Control of Nonholonomic Systems with Dynamically Decoupled Actuators, *Proceedings of the 1993 IEEE Conference on Decision and Control*, San Antonio, Texas, pp. 957-958, December 1993.
413. Godbole, D. and Sastry, S. Approximate Decoupling and Approximate Tracking for MIMO Systems of Goursat Normal and Prolongations, *Proceedings IEEE Conference on Decision and Control*, San Antonio, Texas, pp. 2754-2759, December.1993.
414. Murray, R. and Sastry, S. Nonholonomic Motion Planning -- Steering Using Sinusoids, , Vol. 38 (5):700-716, May 1993. *IEEE Transactions on Automatic Control*

415. Murray, R.M., Walsh, G. and Sastry, S. Stabilization and Tracking for Systems Using Time-Varying State Feedback, *Nonlinear Control Systems Design 1992*, Selected papers from the 2nd IFAC Symposium, Edited by M. Fliess, Pergamon Press, UK, pp. 109-114, 1993.
416. Sarti, A., Walsh, G. and Sastry, S. Steering Left Invariant Control Systems on Matrix Lie Groups, *Proceedings IEEE Conference on Decision and Control*, San Antonio, Texas, pp. 3117-3121, December.1993.
417. Tilbury, D., Murray, R. and Sastry, S. Trajectory Generation for the N Trailer Problem Using Goursat Normal Form, *Proceedings IEEE Conference on Decision and Control*, San Antonio, Texas, pp. 971-977, December.1993.
418. Walsh, G., Sarti, A. and Sastry, S. Algorithms for Steering on the Group of Rotations, *Proceedings American Control Conference*, San Francisco, CA, Vol. 2: 1312-1316, 1993.
419. Burgio, G., Di Benedetto, M. and Sastry, S. Adaptive Linearization by Dynamic State Feedback: A Case Study, *Proceedings of the IFAC Conference on Nonlinear Control Systems Design (NOLCOS)*, Bordeaux, France, pp. 594-600, June 1992.
420. Cole, A., Hsu, P. and Sastry, S. Dynamic Control of Sliding by Robot Hands for Regrasping, *IEEE Transactions on Robotics and Automation*, Vol. 8: 142-152, February 1992.
421. Deno, D.C., Murray, R., Pister, K. and Sastry, S. Fingerlike Biomechanical Robots, *Proceedings of the IEEE Conference on Robotics and Automation*, Nice, France, pp. 566-572, May 1992.
422. Deno, D.C., Murray, R.M., Pister, K.S.J. and Sastry, S. Control Primitives for Robot Systems, *IEEE Conference on Robotics and Automation*, Cincinnati, OH, May 1990, pp. 1866-1871, also *IEEE Transactions on Systems, Man and Cybernetics*, Vol. 22: 183-193, June 1992.
423. Hauser, J., Sastry, S. and Kokotovic, P. Approximate Linearization for Systems Without Relative Degree: The Ball and Beam Example, *IEEE Transactions on Automatic Control*, 37: 392-398, 1992.
424. Hauser, J., Sastry, S. and Meyer, G. Nonlinear Control Design for Slightly Nonminimum Phase Systems: Application to V/STOL Aircraft, *Automatica*, Vol. 28: 665-679, February 1992.
425. Hollerbach, K. Murray, R. and Sastry, S. An Experimental Study of Hierarchical Control Laws Using a Two Fingered Robotic Hand, *Proceedings of the IEEE Conference on Robotics and Automation*, Nice, France, pp. 2770-2775, May 1992.
426. Isidori, A., Sastry, S., Kokotovic, P. and Byrnes, C. Singularly Perturbed Zero Dynamics of Nonlinear Systems, *IEEE Transactions on Control*, Vol. 37: 1625-1631, April 1992.
427. Sastry, S. and Montgomery, R. The Structure of Optimal Controls for a Steering Problem, *Proceedings of the IFAC Conference on Nonlinear Control Systems Design (NOLCOS)*, Bordeaux, France, June 1992.
428. Tilbury, D., Laumond, L-P., Murray, R., Sastry, S. and Walsh, G. Steering Car-like Systems with Trailers Using Sinusoids, *Proceedings of the IEEE Conference on Robotics and Automation*, Nice, France, pp. 1993-1998, May 1992.

429. Walsh, G., Tilbury, D., Sastry, S., Murray, R. and Laumond, L-P. Stabilization of Trajectories for Systems with Nonholonomic Constraints, *Proceedings of the IEEE Conference on Robotics and Automation*, Nice, France, pp. 1999-2004, May 1992.
430. Fu, L.C. and Sastry, S. Frequency Domain Synthesis of Optimal Inputs for On-Line Identification and Control, *IEEE Transactions on Auto Control*, Vol. 36 (3): 354-358, March 1991.
431. Murray, R. and Sastry, S. Steering Controllable Systems Using Sinusoids, *Proceedings of IEEE Conference on Decision and Control*, pp. 1121-1126, December 1991.
432. Murray, R.M. and Sastry, S. An Introduction to Nonholonomic Motion Planning, *Proceedings of the Workshop on Nonholonomic Motion Planning*, IEEE International Conference on Robotics and Automation, Sacramento, CA, 1991.
433. Teel, A., Kadiyala, R., Kokotovic, P. and Sastry, S. Indirect Techniques for Adaptive Input-Output Linearization, *International Journal of Control*, Vol. 52: 193-222, 1991.
434. Walsh, G. and Sastry, S. On Reorienting Linked Rigid Bodies Using Internal Motions, *Proceedings of IEEE Conference on Decision and Control*, pp. 1190-1195, December 1991.
435. Deno, D.C., Murray, R.M., Pister, K.S.J. and Sastry, S. Control Primitives for Robot Systems, *Mathematical Theory of Networks and Systems*, Amsterdam, July 1989 Conference Proceedings, published by Birkhauser, 1990.
436. Murray, R. and Sastry, S. Mathematical Problems in Grasping and Manipulation, *Mathematical Questions in Robotics, AMS Lecture Notes, Short Course Series*, 1990.
437. Murray, R. and Sastry, S. Steering Controllable Systems Using Sinusoids, *Proceedings of IEEE Conference on Decision and Control, Hawaii*, December 1990.
438. Teel, A. and Kadiyala, R., Kokotovic, P. and Sastry, S. Indirect Techniques for Adaptive Input Output Linearization, *American Control Conference*, San Diego, CA, pp. 79-81, May 1990.
439. Cole, A., Hauser, J. and Sastry, S. Kinematics and Control of Multifingered Hands with Rolling Contact, *Proceedings of IEEE International Conference on Robotics and Automation*, Philadelphia, PA, pp. 228-233, 1988; *IEEE Trans. on Automatic Control*, Vol. AC-34 (4): 1989.
440. Cole, A., Hsu, P. and Sastry, S. Dynamic Regrasping by Coordinated Control of Sliding, *Proceedings of IEEE Conference on Robotics and Automation*, Phoenix, AZ, May 1989.
441. Hauser, J., Sastry, S. and Kokotovic, P. Nonlinear Control via Approximate Linearization: the Ball and Beam Example, *IEEE Conference on Decision and Control*, Tampa, FL, pp. 1987-1993, December 1989.
442. Hauser, J., Sastry, S. and Meyer, G. Linearization Techniques for Flight Control Systems, *Proceedings of IFAC Symposium on Nonlinear Control Systems Design*, Capri, Italy, pp. 136-142, 1989.
443. Hsu, P., Hauser, J. and Sastry, S. Dynamic Control of Redundant Manipulators, *Proceedings of IEEE International Conference on Robotics and Automation*,

- Philadelphia, PA, pp. 183-187, 1988; *Journal of Robotics Systems*, Vol. 6 (2): 133-148, 1989.
444. Hsu, P., Li, Z. and Sastry, S. On Grasping and Coordinated Manipulation by Multifingered Robot Hand, *Proceedings of IEEE International Conference on Robotics and Automation, Philadelphia, PA*, pp. 384-389, 1988, also *International Journal of Robotics Research*, Vol. 8: 33-50, 1989.
445. Li, Z. and Sastry, S. A Unified Approach for the Control of Multifingered Robot Hands, *Contemporary Mathematics*, Vol. 97: 217-239 American Mathematical Society 1989.
446. Li, Z., Canny, J.F. and Sastry, S. On Motion Planning for Dexterous Manipulation, *Proceedings of IEEE Conference on Robotics and Automation*, Phoenix, AZ, May 1989.
447. Murray, R.M. and Sastry, S. Control Experiments in Grasping, *Proceedings of IEEE Conference on Robotics and Automation*, Phoenix, AZ, May 1989.
448. Sastry, S. and Bodson, M. Adaptive Control: Stability, Convergence and Robustness, (book), Prentice Hall, 1989.
449. Sastry, S. and Isidori, A. Adaptive Control of Linearizable Systems, *IEEE Transactions on Automatic Control*, Vol. 34: 1123-1131, November 1989.
450. Sastry, S. and Li, Z. Robot Motion Planning with Nonholonomic Constraints, *IEEE Conference on Decision and Control*, Tampa, FL, pp. 211-216, December 1989.
451. Sastry, S., Hauser, J. and Kokotovic, P. Zero Dynamics of Regularly Perturbed Systems may be Singularly Perturbed, *Systems and Control Letters*, Vol. 13: 299-314, 1989.
452. Bai, E., Fu, L.C. and Sastry, S. Averaging Analysis for Discrete Time and Sampled Data Adaptive Systems, *IEEE Transactions on Circuits and Systems*, Vol. 35:137-149, February 1988.
453. Behtash, S. and Sastry, S. Stabilization of Nonlinear Systems with Uncontrollable Linearization, *IEEE Transactions on Automatic Control*, Vol. 33 (6): June 1988. *Conference on Robotics and Automation*, pp. 389-395, Raleigh, NC, April 1987;
454. Li, Z. and Sastry, S. Task Oriented Optimal Grasping by Multifingered Hands, *Proceedings on IEEE Conference on Robotics and Automation*, pp. 389-395, Raleigh, NC, April 1987; *IEEE Journal of Robotics and Automation*, February 1988.
455. Sastry, S. and Kokotovic, P.V. Feedback Linearization in the Presence of Uncertainties, *International Journal of Adaptive Control and Signal Processing*, Vol. 2: 327-346, 1988.
456. Bai, E. and Sastry, S. Adaptive Stabilization of Sampled Systems, *Systems and Control Letters*, Vol. 8: 389-395, 1987.
457. Bai, E. and Sastry, S. Global Stability Proofs for Continuous Time Indirect Adaptive Control Schemes, *IEEE Transactions on Automatic Control*, Vol. AC-32 (6): pp. 537-543, June 1987.
458. Craig, J., Hsu, P. and Sastry, S. Adaptive Control of Mechanical Manipulators, *International Journal of Robotics Research*, Vol. 6, No. 2, pp. 16-28, 1987.

459. Fu, L.C. and Sastry, S. Slow Drift Instability in Model Reference Adaptive Systems an Averaging Analysis, *International Journal of Control*, Vol. 45 (2): 503-527, 1987.
460. Hsu, P. and Sastry, S. The Effect of Discretized Feedback in a Closed Loop System, *Proceedings of IEEE Conference on Decision and Control*, pp. 1158-1523, Los Angeles, CA, December 1987.
461. Hsu, P., Bodson, M., Sastry, S. and Paden, B.E. Adaptive Identification and Control without Using Joint Accelerations, *Proceedings of IEEE Conference on Robotics and Automation*, pp. 1210-1216, Raleigh, NC, April 1987.
462. Paden, B.E. and Sastry, S. A Calculus for Computing Filippov's Differential Inclusion with Application to the Variable Structure Control of Robots, *IEEE Transactions on Circuits and Systems*, Vol. CAS-34 (1): 73-82, January 1987.
463. Bai, E. and Sastry, S. Discrete Time Adaptive Control Using Prior Information, *IEEE Transactions on Automatic Control*, Vol. AC-31 (8): 779-782, August 1986.
464. Bai, E. and Sastry, S. Parameter Identification Using Prior Information, *International Journal Of Control*, Vol. 44 (2): 455-473, September 1986.
465. Bodson, M., Sastry, S. Anderson, B.D.O., Mareels, I. and Bitmead, R. Nonlinear Averaging Theorems and the Determination of Parameter Convergence Rates in Adaptive Control, *Systems and Control Letters*, September 1986.
466. Boyd, S. and Sastry, S. Necessary and Sufficient Conditions for Parameter Convergence in Adaptive Control, *Proceedings of American Control Conference*, San Diego, CA, June 1984; *Proceedings of Berkeley-Ames Symposium on Non-linear Problems in Fluid Mechanics and Control*, pp. 81-103, Math. Sci. Press, Brookline, MA, August 1984; *Automatica*, Vol. 22 (6): 629-639, September 1986.
467. Fu, L.C., Bai, E. and Sastry, S. Averaging Analysis for Discrete Time and Sampled Data Systems, *Proceedings of IEEE Conference on Decision and Control*, Athens, Greece, pp. 1411-1416, December 1986.
468. Fu, L.C., Bodson, M. and Sastry, S. New Stability Theorems for Averaging and their Application to the Convergence Analysis of Adaptive Identification and Control Schemes, *Singular Perturbations and Asymptotic Analysis in Control Systems*, Springer-Verlag Lecture Notes in Control and Information Sciences, New York, Vol. 90: 374-417, 1986.
469. Kappos,E. and Sastry, S. Lyapunov Controllability and Global Optimal Control, *Proceedings of IEEE Conference on Decision and Control*, Athens, Greece, pp. 973-975, December 1986.
470. Li, Z. and Sastry, S. Conditioned Invariant Subspaces, Disturbance Decoupling and Solutions of Rational Matrix Equations , *International Journal of Control*, Vol. 43: 91-108. 1986.
471. Madriz, R.S. and Sastry, S. Multiple Time Scales in Nonlinear Systems, *Proceedings of IEEE Conference on Decision and Control*, Las Vegas, NV, December 12-15, 1984; *Circuits, Systems and Signal Processing*, Vol. 5(1):153-169, March 1986.
472. Mason, J., Bai, E., Fu, L.C., Bodson, M. and Sastry, S. Analysis of Adaptive Identifiers in the Presence of Un-modeled Dynamics, *Proceedings of IEEE Conference on Decision and Control*, Los Angeles, CA, December 1987, also *IEEE Transactions AC.*, Vol. 33: 969-976, 1986.

473. Nordstrom, N. and Sastry, S. Persistency of Excitation in Possibly Unstable Continuous Time Systems and Parameter Convergence in Adaptive Identification , *Proceedings of 2nd IFAC Workshop, Lund, Sweden, July 1-3, 1986.*
474. Packard, A. and Sastry, S. Solution of Rational Matrix Equations in the State Space and its Application to Computer Aided Control Systems Design, *Proceedings of Conference on Computer Aided Control Systems Design, Santa Barbara, CA, March 29-30, 1985, also International Journal of Control, Vol. 3: 65-90, 1986.*
475. Paden, B.E. and Sastry, S. A Calculus for Computing Fillipov's Differential Inclusion, *Proceedings of IEEE Conference on Decision and Control, Athens, Greece, pp. 578-583, December 1986.*
476. Paden, B.E.,B. and Sastry, S. Optimal Kinematics for 6R Robot Manipulators, *International Journal of Robotics, March 1986.*
477. Sastry, S. and Paden, B.E. Non-linear Systems and Control Problems in Robotics, *Proceedings of IEEE International Symposium on Circuits and Systems, Kyoto, Japan, June 5-7, 1985.*
478. Bodson, M. and Sastry, S. Robustness for Model Reference Adaptive Control Schemes, *Proceedings of IEEE International Symposium on Decision and Control, Las Vegas, NV, December 12-15, 1984.*
479. Madriz, R.S. and Sastry, S. Input-Output Description of Linear Systems with Multiple Time Scales, *International Journal of Control, Vol. 40 (4): 699-721, August 1984.*
480. Salam, F.M.A. and Sastry, S. The Complete Dynamics of the Josephson Junction: Regions of Chaos, ERL Memo No. H83/69, September 1983; *Proceedings of International Symposium on Circuits and Systems, Montreal, Canada, May 1984; Chaos in Nonlinear Dynamical Systems, J. Chandra (Ed.), SIAM Philadelphia, PA, pp. 43-56, 1984.*
481. Sastry, S. Asymptotic Behaviour of Stochastic Dynamical Systems, *Proceedings of 9th World Congress of the International Federation of Automatic Control, Hungary, July 1984.*
482. Sastry, S. Model Reference Adaptive Control Stability, Parameter Convergence and Robustness, *IMA Journal of Control and Information, Vol. 1: 27-66, July 1984.*
483. Sastry, S. Tracking Control for Non-Linear Systems Using Sliding Modes, *International Conference on Systems, Man and Cybernetics, Bombay, India, June 1984.*
484. Coderch, M., Sastry, S., A. Willsky and Castanon, D. Hierarchical Aggregation of Linear Systems with Multiple Time Scales, L.I.D.S., M.I.T. Paper No. P 1187, February 1982; *IEEE Transactions on Automatic Control, Vol. 28: 465-492, August 1983.*
485. Coderch, M., Sastry, S., A. Willsky and Castanon, D. Hierarchical Aggregation of Singularly Perturbed Finite State Markov Processes, L.I.D.S., M.I.T. Paper No. P 1198, April 1982; *Stochastics, Vol. 8: 259-289, 1983.*
486. Krause, J., Sastry, S., Athans, M. and Valavni, L. Adaptive Control in the Presence of High Frequency Modeling Errors, *Proceedings of Control and Decision Conference, San Antonio, Texas, December 1983.*

487. Sastry, S. and Boyd, S. On Parameter Convergence in Adaptive Control, *Systems and Control Letters*, Vol. 3: 311-319, 1983.
488. Sastry, S. and Desoer, C.A. Asymptotic Unbounded Root Loci: Formulae and Computation, L.I.D.S., M.I.T. Paper No. P 4609, 1982, also in ERL Memo and *IEEE Transactions on Automatic Control*, Vol. 28: 557-569, May 1983.
489. Sastry, S. and Slotine, J.J. Robustness Issues in the Sliding Control for Non-Linear Systems, *Proceedings of Control and Decision Conference, San Antonio, Texas*, December 1983.
490. Sastry, S. and Slotine, J.J. Tracking Control for Non-Linear Systems Using Sliding Modes with Application to the Control of Robot Manipulators, *Proceedings of Automatic Control Conference*, San Francisco, CA, June 1983; *International Journal of Control*, pp. 465-492, August 1983.
491. Sastry, S. Effects of Small Noise on Implicitly Defined Non-Linear Dynamical Systems, *Proceedings of International Symposium on Circuits and Systems*, pp. 139-145, Newport Beach, CA, May 1983.
492. Sastry, S. Effects of Small Noise on Implicitly Defined Systems of Differential Equations, *IEEE Transactions on Circuits and Systems*, October 1983.
493. Sastry, S. Small Random Perturbations of Dynamical Systems, *Proceedings of Control and Decision Conference*, San Antonio, Texas, December 1983.
494. Arapostathis, A. Sastry, S. and Varaiya, P.P. Global Analysis of Swing Dynamics, *Proceedings of International Symposium on Circuits and Systems*, pp. 927-929, Chicago, IL, April 1981, also *IEEE Transactions on CAS*, Vol. CAS-28, pp. 673-679, 1982.
495. Sastry, S. and Desoer, C.A. Robustness of Controllability and Observability of Linear Time-Varying Systems, UCB, ERL Memo No.M79/79, October 1979; *IEEE Transactions on Automatic Control*, Vol. 27: 933-940, August 1982.
496. Sastry, S., Arapostathis, A. and Varaiya, P.P. Global Behavior of Interconnected Power Systems: Part I, UCB, ERL Memo No. M81/3, 1981; *IEEE Transactions on Circuits and Systems*, Vol. 29, November 1982.
497. Sastry, S., Coderch, M., Willsky, A. and Castanon, D. Hierarchical Aggregation of Linear Systems with Multiple Time Scales, *Proceedings of IEEE International Symposium on Large Scale Systems*, pp. 381-385, Virginia Beach, VA, October 1982.
498. Arapostathis, A., Sastry, S. and Varaiya, P.P. Analysis of the Power Flow Equation, UCB, ERL Memo No. M80/35, July 1981; *International Journal of Power Systems*, Vol. 3 (3):115-126, July 1981.
499. Sastry, S., Coderch, M., Willsky, A. and Castanon, D. Hierarchical Aggregation of Linear Systems with Multiple Time Scales, *Proceedings of Conference on Decision and Control*, San Diego, CA, December 1981.
500. Sastry, S., Desoer, C.A. and Varaiya, P.P. Asymptotic Unbounded Root Loci-Formulae and Computation, *Proceedings of Conference on Decision and Control*, pp. 120-122, San Diego, CA, December 1981.
501. Sastry, S., Desoer, C.A. and Varaiya, P.P. Jump Behavior of Circuits and Systems, UCB, ERL Memo No. M80/44, 1980; *IEEE Transactions on Circuits and Systems*, Vol. 28: 1109-1125, December 1981.

502. Sastry, S., Desoer, C.A. and Varaiya, P.P. Jump Behavior of Circuits and Systems, *Proceedings of International Symposium on Circuits and Systems*, pp. 451-454, Chicago, IL, April 1981.
503. Sastry, S., Desoer, C.A. and Varaiya, P.P. Jump Behavior of Circuits and Systems, *Proceedings of 22th Mid-West Symposium on Circuits and Systems*, pp. 539-544, Albuquerque, NM, June 1981.
504. Sastry, S., Varaiya, P.P. and Desoer, C.A. Jump Behavior of Systems and Circuits, *Proceedings of Conference on Decision and Control*, pp. 1043-1047, San Diego, CA, December 1981.
505. Sastry, S. and Hijab, O. Bifurcation in the Presence of Small Noise, *Proceedings of 3rd Symposium on Mathematical Theory of Networks and Systems*, pp. 252-256, Santa Monica, CA, August 1981.
506. Sastry, S. and Hijab, O. Bifurcation in the Presence of Small Noise, L.I.D.S., M.I.T., Paper No. P 1089, 1981; *Systems and Control Letters*, Vol. 1:159-167, November 1981.
507. Sastry, S. and Hijab, O. Filtering and Singular Perturbation for a Class of Markov Processes, *Proceedings of Conference on Decision and Control*, San Diego, CA, December 1981.
508. Sastry, S. and Hijab, O. Singular Perturbations and Filtering for a Class of Markov Processes, L.I.D.S., M.I.T. Paper No. P 1143, September 1981.
509. Sastry, S. and Varaiya, P.P. Coherence and Alert States for Interconnected Power Systems, UCB, ERL Memo No. M79/45, August 1979; *IEEE Transactions on Automatic Control*, Vol. 26: 218-226, February 1981.
510. Arapostathis, A., Sastry, S. and Varaiya, P.P. Bifurcation Analysis of the Load Flow Equations, *Proceedings of Conference on Decision and Control*, pp. 641-644, Albuquerque, NM, December 1980.
511. Arapostathis, A., Sastry, S. and Varaiya, P.P. On the Solutions of the Load Flow Equations in Power Systems, *Proceedings of Conference on Decision and Control*, pp. 152-153, Albuquerque, NM, December 1980.
512. Sastry, S. and Varaiya, P.P. Coherency and Alert States for Interconnected Power Systems, *Proceedings of International Symposium on Circuits and Systems*, pp. 709-713, Houston, Texas, April 1980.
513. Sastry, S. and Desoer, C.A. Robustness of Controllability and Observability of Linear Time Varying Systems, *Proceedings of International Symposium on Circuits and Systems*, pp. 698-701, Houston, Texas, April 1980.
514. Sastry, S. and Varaiya, P.P. Hierarchical Stability and Alert State Steering Control of Inter-Connected Power Systems, UCB, ERL Memo No. M79/81, December 1979; *IEEE Transactions on Circuits and Systems*, Vol. 27: 1102-1112, November 1980.
515. Sastry, S., Mardsen, J.E. and Holmes, P.J. Dynamical Systems and Invariant Manifolds, *New Approaches to Nonlinear Problems in Dynamics*, pp. 3-25, SIAM, Philadelphia, PA, 1980.
516. Sastry, S. and Desoer, C.A. Asymptotic Unbounded Root Loci by the Singular Value Decomposition, UCB, ERL Memo No. M79/57, August 1979; *Proc. Of the*

NATO-AMS Advanced Study Institute on Algebraic and Geometric Methods in Linear Systems Theory, Harvard University, June 1979.

517. Sastry, S., A Microwave Phase Locked FM Receiver, IEEE Student Papers, pp. 235-240, 1977. *IEEE Region X, Undergraduate Students' Paper Contest, First Prize Winner*, TTO112-3.