

## CURRICULUM VITAE ET STUDIORUM

## PERSONAL INFORMATION

Family name, First name: **Schenato, Luca**

Researcher unique identifier(s) ORCID: 0000-0003-2544-2553

Date of birth: **28/04/1974**

Nationality: **Italian**

URL for web site: <http://automatica.dei.unipd.it/people/schenato.html>

## EDUCATION

2003 **Ph.D.**, Dept. of Electrical Eng. and Computer Sciences (EECS), **U.C. Berkeley**, U.S.A.

Thesis: *Analysis and Control of Flapping Flight: from Biological to Robotic Insects*

Advisor: **Prof. Shankar Sastry**

1999 **Eng. Degree (master)**, Dept. of Electronics Engineering (DEI), **Univ. of Padova**, Italy

## CURRENT POSITION

Oct. 2007 – present **Associate Professor**, Dept. of Information Eng., **Univ. of Padova**, Italy

## PREVIOUS POSITIONS

Oct. 2013 – Jun. 2014 **Visiting Professor**, Dept. of Elec. Eng. and Comp. Scien., **U.C. Berkeley**, U.S.A.

Oct. 2004 – Sep. 2007 **Adjunct Professor**, Dept. of Information Eng., **University of Padova**, Italy

Jan. 2004 – Sep. 2004 **Post-doc Fellow**, Dept. of Elec. Eng. and Comp. Scien., **U.C. Berkeley**, U.S.A.

## FELLOWSHIPS

2005 **Marie Curie International Reintegration Grant**, FP7, European Union

2004 **“Reverse Brain Drain” Professorship** (aka “Rientro dei Cervelli”), Italian Ministry of Education and University (MIUR) (**only 80 positions granted in Italy in 2004**)

## ERC PARTICIPATION

2016 **ERC Consolidator Grant**, Passed first stage and invited to interview in Bruxelles. Proposal title: *“MAGIC: Multi-Agent Intelligent Control for time-critical Cyber-Physical Systems”*. Proposal not funded.

## AWARDS

2014 **European Control Award**, European Control Association (EUCA), for his outstanding contributions to *“Networked Control Systems and Multi-agent Systems”* awarded to young researchers **40 years old** or younger.

2006 **Eli Jury Award**, Dept. of EECS., **U.C. Berkeley**, U.S.A. for outstanding research achievement in the area of *systems, communications, control and signal processing*, awarded to U.C. Berkeley **alumni** up to two years after Ph.D. degree.

## MAIN SUPERVISION OF STUDENTS AND POSTDOCS

2015 – present **Ph.D.**, Nicoletta Bof, Dept. of Information Engineering, Univ. of Padova, Italy  
Topic: *“Distributed optimization for multi-agent systems over lossy networks”*

2015 – 2016 **Postdoc**, Guido Cavarro, Dept. of Information Engineering, Univ. of Padova, Italy  
Topic: *“Estimation and control for smart grids subject to unreliable communication”*  
Currently **Post-doctoral Fellow** at **Virginia Tech. Univ.**, Blacksburg, Virginia, USA

2013 – 2016 **Ph.D.**, Andrea Carron, Dept. of Information Engineering, Univ. of Padova, Italy  
Topic: *“Efficient non-parameteric localization and mapping for robotic networks”*  
Currently **Post-doctoral Fellow** at **ETH**, Zurich, Switzerland

2008 – 2010 **Ph.D.**, Damiano Varagnolo, Dept. of Information Engineering, Univ. of Padova, Italy  
Topic: *“Distributed algorithms for estimation and control in Networked Control Systems”*  
Currently **Assistant Professor** at **Lulea University of Technology**, Sweden

2004 – present Main advisor for **28 Master** students

## CO-SUPERVISION OF STUDENTS AND POSTDOCS

2013 – 2016 **Ph.D.**, Marco Todescato, Dept. of Information Engineering, Univ. of Padova, Italy

2009 – 2011 **Ph.D.**, Filippo Zanella, Dept. of Information Engineering, Univ. of Padova, Italy  
Currently **start-up founder** of Selff, <http://selffapp.com/>

2010 – 2011 **Postdoc.**, Federica Garin, Dept. of Information Engineering, Univ. of Padova, Italy  
Currently **Research Associate** (CR1) at INRIA Rhone-Alpes, France

2008 – 2010 **Ph.D.**, Saverio Bolognani, Dept. of Information Engineering, Univ. of Padova, Italy  
Currently **Research Associate** at **ETH**, Zurich, Switzerland

2007 – 2009 **Ph.D.**, Simone Del Favero, Dept. of Information Engineering, Univ. of Padova, Italy  
To be appointed as **Assistant Professor** at Univ. of Padova, Italy

**HOST OF VISITING SCHOLARS**

- 2017 **Professor**, Reza Arganhddeh, Florida University, USA  
 2017 **Professor**, Subhrakanty Dey, Uppsala University, Sweden  
 2015 **Ph.D.**, Xiaobo Gu, Beihang University, China  
 2015 **Master**, Nelson Chan, University of Twente, Netherlands  
 2014 **Professor**, Subhrakanty Dey, Uppsala University, Sweden  
 2013 **Professor**, Sinan Yildirim, Ege University, Turkey  
 2012 **Professor**, Subhrakanty Dey, University of Melbourne, Australia

**EXAMINER OF PH.D. STUDENTS**

- 2017 Simone Nardi, University of Pisa, Italy  
 2017 Jingbo Wu, Stuttgart University, Italy  
 2015 Grazia Barchi, University of Trento, Italy  
 2015 Burak Demirel, KTH, Sweden  
 2013 Yiming Ji, Australian National University, Australia  
 2013 Domenica Borra, Polytechnic of Turin, Italy  
 2013 Luis Orihuela, University of Seville, Spain  
 2012 Nicolas Cardoso De Castro, INRIA Grenoble, France  
 2009 Nicola Varenese, New Jersey Institute of Technology, USA  
 2009 Maja Karasalo, KTH, Sweden

**TEACHING ACTIVITIES**

- 2004 – present **Main Instructor** at University of Padova, Italy for (**GR**=graduate, **U**=undergraduate):  
*Control Systems Laboratory*, (**G**:2016)  
*Automatic Control Systems*, (**U**: 2015,2016)  
*Controlli Automatici*, (**U**: 2014)  
*Progettazione di sistemi di controllo* (**GR**: from 2005 till 2013)  
*Laboratorio di controlli I* (**GR**: from 2004 till 2007, 2015)  
*Laboratorio di controlli II* (**GR**: 2008,2009)

**ORGANISATION OF SCIENTIFIC MEETINGS**

- 2016 **Coordinator co-Chair**, Ph.D. Summer School on Distributed Control and its Applications, Bertinoro, Italy (sponsored by Italian Society of Automation S.I.D.R.A.)  
 2010 **Advisory Committee**, 2<sup>st</sup> IFAC Workshop on Distributed Estimation and Control in Networked Systems (NECSYS'10), Annecy, France, (sponsored by IEEE Cont. Syst. Soc.)  
 2009 **Vice General Chair**, 1<sup>st</sup> IFAC Workshop on Distributed Estimation and Control in Networked Systems (NECSYS'09), Venice, Italy (sponsored by IEEE Cont. Syst. Soc.)  
 2009 **Program Chair**, 2<sup>nd</sup> Int. Conf. on Robot Communication and Coordination (ROBOCOMM'09), Odense, Danmark (sponsored by IEEE Rob. and Autom. Soc.)  
 2007 **Vice General Chair**, 1<sup>st</sup> Int. Conf. on Robot Communication and Coordination (ROBOCOMM'07), Athens, Greece (sponsored by IEEE Rob. and Autom. Soc.)

**INSTITUTIONAL RESPONSIBILITIES**

- 2014 – present **External Relations Committee** of the Dept. of Inf. Eng., Univ. of Padova  
 2012 – present **Board of Directors**, Ph.D. School in ICT, Dept. of Inf. Eng., Univ. of Padova  
 2010 – 2013 **Vice-Chair** for the Master Deg. in Automation Eng., Dept. of Inf. Eng., Univ. of Padova  
 2011 **Evaluation Committee** for the Young Researcher Fellowships and for the Strategic Projects for the Department of Information Engineering, University of Padova

**COMMISSIONS OF TRUST**

- 2016 – present **Associate Editor**, IEEE Transactions on Control of Network Systems  
 2010 – 2013 **Associate Editor**, IEEE Transactions on Automatic Control  
 2012 **Best Student Paper Committee**, 3<sup>rd</sup> IFAC Workshop Networked Systems (NECSYS'12)  
 2009 – 2011 **Conference Editorial Board**, IEEE Control System Society (IEEE CSS)  
 2011 **Conference Editorial Board**, IEEE Robotics and Automation Society (IEEE RAS)  
 2010 **Best Student Paper Committee**, 2<sup>nd</sup> IFAC Workshop Networked Systems (NECSYS'10)  
 2010 **Conference Editorial Board**, ACM Int. Conf. on Hybrid Sys. Comp. and Cont. (HSCC'10)  
 2010 **Conference Editorial Board**, Int. Symp. on Distrib. Auton. Robot. Sys. (DARS'10)

**PROPOSAL EVALUATOR**

- 2016 **Proposal evaluator** for Swiss National Science Foundation, Switzerland  
 2014 **Proposal evaluator** for FONDECYT program, Chilean Nat. Sci. and Tech. Comm., Chile  
 2011 **Proposal evaluator** for Swiss National Science Foundation, Switzerland

2009 **Proposal evaluator** for FONDECYT program, Chilean Nat. Sci. and Tech. Comm., Chile

### MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2017 – present **Fellow**, IEEE (**top 15 youngest fellow out of the total 300** IEEE fellows elevated in 2017 in terms of year-span from PhD date to 2017)

2014 – present **Member**, Tech. Comm. on *Multi-robot systems*, IEEE Rob. and Autom. Soc.,

2011 – present **Member**, Tech. Comm. on *Comp. Aspects of Control System Design*, IEEE CSS

2008 – present **Member**, Tech. Comm. 1.5 on *Networked Systems* for Int. Fed. on Aut. Cont. (IFAC)

2004 – present **Member**, IEEE Control System Society (IEEE CSS)

### CURRENT MAJOR COLLABORATIONS

Prof. Kameshwar Poolla **U.C.Berkeley**, U.S.A. Topic: *Estimation and Control in smart energy grids*

Dr Saverio Bolognani **ETH**, Switzerland. Topic: *Topology identification in smart energy grids*

Dr Antonio Franchi **CNRS LAAS**, France. Topic: *Cooperative robotic networks*

Prof. Subhrakanty Dey **Uppsala Univ.**, Sweden. Topic: *Control subject to communication limits*

Prof. Sinan Yildirim **Ege Univ.**, Turkey. Topic: *Time synch in wireless sensor networks*

Dr Ashish Parandhapande **Philips Labs.**, Netherlands. Topic: *Lighting control in smart buildings*

### BIBLIOGRAPHICAL SUMMARY

<b>Journal papers</b>	<b>32</b>	8 with Ph.D. Advisor, <b>24 without Ph.D Advisor</b>
<b>Conference papers</b>	<b>79</b>	19 with Ph.D. Advisor, <b>60 without Ph.D Advisor</b>
<b>h-index</b>	<b>37</b>	(Google Scholar w/ self cit.), <b>24</b> (SCOPUS w/o self cit.)
<b>Total citations</b>	<b>6872</b>	(Google Scholar w/ self cit.), <b>4090</b> (SCOPUS w/o self cit.) ( <b>most cited scholar</b> among all Associate Professors in Automatic Control in Italy, SSD ING-INF/04)
<b>Papers with 100+ citations</b>	<b>13</b>	(Google Scholar w/ self cit.), <b>9</b> (SCOPUS w/o self cit.)

### JOURNALS PROFILE (SELECTED)

All the 32 journal papers are published in leading International Peer-reviewed journals in Control Systems (**Cn**), Robotics (**Ro**) and Communications (**Cm**), and Applications (**Ap**). Top IF journals:

6 Journal papers in <i>IEEE Transactions on Automatic Control</i>	<b>(Imp. Fac.: 2.779) (Cn)</b>
4 Journal papers in <i>Automatica</i>	<b>(Imp. Fac.: 3.020) (Cn)</b>
3 Journal paper in <i>Proceedings of the IEEE</i>	<b>(Imp. Fac.: 4.934) (Cn,Cm,Ro)</b>
3 Journal paper in <i>IEEE Transactions on Robotics</i>	<b>(Imp. Fac.: 2.432) (Ro)</b>
2 Journal paper in <i>Sensors</i>	<b>(Imp. Fac.: 2.245) (Ap)</b>
2 Journal paper in <i>Energy and Buildings</i>	<b>(Imp. Fac.: 2.884) (Ap)</b>
1 Journal papers in <i>IEEE Trans. on Neural Networks and Learning Systems</i>	<b>(Imp. Fac.: 4.291)</b>
1 Journal papers in <i>International Journal of Robust and Nonlinear Control</i>	<b>(Imp. Fac.: 3.176) (Cn)</b>
1 Journal paper in <i>IEEE Journal of Selected Topics in Signal Processing</i>	<b>(Imp. Fac.: 2.373) (Cm)</b>
1 Journal paper in <i>IEEE Journal on Selected Areas in Communications</i>	<b>(Imp. Fac.: 3.453) (Cm)</b>

### SELECTED PUBLICATIONS

**Early high-impact publications** (GS= Google Scholar w/ self cit., SC = SCOPUS w/o self cit.)

- [1] B. Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, M. Jordan, S. Sastry. "Kalman filtering with intermittent observations". *IEEE Trans. on Automatic Control*, 49, 1453-1464, 2004 (**22<sup>st</sup> most cited** paper out of 9902 **since** the appearance of the journal in **1956**, the **6<sup>th</sup> most cited paper** out of 4082 **since** the paper publication **2004**, source: ISI Web of Knowledge) (cit: **1613** GS, **1139** SC)
- [2] X. Deng, L. Schenato, W. Wu, S. Sastry. "Flapping flight for biomimetic robotic insects: Part I - System modelling". *IEEE Trans. on Robotics*, 22, 776-788, 2006, (**in top 5% of most cited papers** out of 1360 **since** the journal appearance in **2005**, source: ISI Web of Knowledge) (cit: **205** GS, **151** SC)
- [3] L. Schenato, B. Sinopoli, M. Franceschetti, K. Poolla, S. Sastry. "Foundations of control and estimation over lossy networks". *Proc. of the IEEE*, 95, 163-187, 2007, (**in top 5% of most cited papers** out of 5275 **since 1950**, source: ISI Web of Knowledge) (cit: **835** GS, **580** SC)

### Single author publications

- [4] L. Schenato. "Optimal estimation in networked control systems subject to random delay and packet drop". *IEEE Trans. on Automatic Control*, 53, 1311-1317, 2008 (cit: **291** GS, **225** SC)
- [5] L. Schenato. "To Zero or to Hold Control Inputs With Lossy Links?". *IEEE Trans. on Automatic Control*, 54, 1093-1099, 2009 (cit: **133** GS, **103** SC)

### Publications with own group and fellows (recent)

- [6] F. Garin, L. Schenato. "A survey on distributed estimation and control applications using linear consensus algorithms". *Networked Control Systems*. 406, 75-107, 2010 (cit: **94** GS, **29** SC)

- [7] L. Schenato, F. Fiorentin. "Average TimeSynch: a consensus-based protocol for time synchronization in WSN". *Automatica*, 47(9), 1878-1886, 2011 (cit: **178 GS**, **138 SC**)
- [8] R. Carli, A. Chiuso, L. Schenato, S. Zampieri. "Optimal Synchronization for Networks of Noisy Double Integrators". *IEEE Transactions on Automatic Control*, vol. 56(5), 1146-1152, 2011 (cit: **60 GS**, **48 SC**)
- [9] A. Chiuso, N. Laurenti, L. Schenato, A. Zanella "LQG-like control of scalar systems over communication channels: the role of data losses, delays and SRN limitations." *Automatica*, 50(12), 3155-3163, 2014
- [10] D. Varagnolo, F. Zanella, A. Cenedese, G. Pillonetto, L. Schenato. "Newton-Raphson Consensus for Distributed Convex Optimization". *IEEE Trans. on Automatic Control*, 61(4), 994-1009, 2016

#### INVITED TALKS AT CONFERENCES

- 2016 **Plenary Lecture**, "Multi-agent Map-building over Lossy Networks: From Parametric to Non-parametric Approaches", *IFAC Workshop on Estimation and Control of Networked Systems*, Tokyo, Japan
- 2014 **Plenary Lecture**, "Getting Multi-agent Systems to Cooperate", *European Control Conference*
- 2014 **Keynote lecture**, "Control over finite capacity channels: the role of data losses, delays and SNR limitations", *Information Theory and Applications Workshop*, San Diego, USA
- 2013 **Keynote lecture**, "Newton-Raphson Consensus for Distributed Convex Optimization", *HYCON2 Workshop on Distrib. Optimization in Large Networks and its Applications*, Zurich, Switzerland
- 2011 **Keynote lecture**, "The Consensus Algorithm in Distributed Multi-Agent Systems", *Symposium on New Directions of Automatic Control*, Seoul, Korea
- 2010 **Keynote lecture**, "Estimation and Control applications of linear consensus algorithms", at *LCCC Workshop on Multi-Agent Estimation and Control*, Lund, Sweden

#### INVITED TALKS AT PH.D. SCHOOLS

- 2016 **Keynote lecture**, "The consensus algorithm and its application to Wireless Sensor Networks", *SIDRA Ph.D. Summer School on Automatic Control Systems*, Bertinoro, Italy
- 2009 **Keynote lecture**, "Networked Control Systems subject to random delay and packet loss", *Minicourse at IFAC Workshop on Estimation and Control of Networked Systems*, Venice, Italy
- 2009 **Keynote lecture**, "Distributed Estimation and Consensus", *3<sup>rd</sup> WIDE Ph.D. School on Networked Control Systems*, Siena, Italy, July 2009
- 2007 **Keynote lecture**, "Applications of consensus algorithms", *SIDRA Ph.D. Summer School on Automatic Control Systems*, Bertinoro, Italy

#### PROJECTS: PRINCIPAL INVESTIGATOR OR AREA COORDINATOR

- 2015 – 2016 **PI**, "Designing novel cost-effective distributed strategies for the control and optimization of smart micro-grids", *University of Padova Research Funding*, **25K Euro**
- 2008 – 2011 **Area Coordinator**, "WISE-WAI: Wireless Sensor Networks for city-Wide Ambient Intelligence", *CARIPARO Foundation*, Italy, **500K Euro (total)**, **125K Euro (personal)**
- 2005 – 2007 **PI**, SENSNET: "Analysis and design of large scale sensor networks for distributed control applications", *European Union*, MIRG-6-CT- 2005-014815, **80K Euro**
- 2004 – 2007 **PI**, "Design and optimization of control for a network of systems with distributed sensors", *Italian Ministry of Education and University (MIUR)*, **19K Euro**

#### PROJECTS: PARTECIPANT

- 2013 – 2014 "Micro-Synchrophasors for Distribution Systems", *ARPA-e Project DE-AR0000340*, U.C. Berkeley, U.S.A. **4.4M \$ (total)**, **1.8M \$ (UC Berkeley)**
- 2010 – 2013 HYCON2: "Highly-complex and networked control systems", *EU FP7 Network of Excellence*, **3.7M Euro (total)**, **156K Euro (Univ. of Padova)**
- 2008 – 2010 FeedNetBack: "Feedback design for wireless networked systems", *EU STREP project*, **2.9M Euro (total)**, **400K Euro (Univ. of Padova)**
- 2004 – 2005 "RECSYS: Real-Embedded Control of Mobile Systems with Distributed Sensing", *EU FP6 STREP project*, **1.3M Euro (total)**, **390K Euro (Univ. of Padova)**

## PUBLICATIONS (FULL LIST)

## JOURNAL ARTICLES: conditionally accepted

- [Jca-1] S. Borile, A. Pandharipande, D. Caicedo, L. Schenato, A. Cenedese. **A data-driven daylight estimation approach to lighting control.** *IEEE Transactions on Control Systems Technology*
- [Jca-2] S. Dey, A. Chiuso, L. Schenato. **Feedback Control over lossy SNR-limited channels: linear encoder-decoder-controller design.** *IEEE Transactions on Automatic Control*
- [Jca-3] M. Todescato, A. Carron, R. Carli, G. Pillonetto, L. Schenato. **Multi-Robots Gaussian Estimation and Coverage Control: from Server-based to Distributed Architecture.** *Automatica*
- [Jca-4] K. Yildirim, R. Carli, L. Schenato. **Adaptive Proportional-Integral Clock Synchronization in Wireless Sensor Networks.** *IEEE Transaction on Control Systems Technology*

## JOURNAL ARTICLES: published

- [J-1] L. Brinon-Arranz, L. Schenato. **Distributed Source-seeking via a Circular Formation of Agents with asynchronous communication.** *IEEE Trans. on Control of Network Systems*, vol. 3(2), pp. 104--115, 2016
- [J-2] D. Varagnolo, F. Zanella, A. Cenedese, G. Pillonetto, L. Schenato. **Newton-Raphson Consensus for Distributed Convex Optimization.** *IEEE Trans. on Automatic Control*, vol. 61(4), pp. 994--1009, 2016
- [J-3] Pandharipande, A. Peruffo, D. Caicedo, L. Schenato. **Lighting control with distributed wireless sensing and actuation for daylight and occupancy adaptation.** *Energy and Buildings*, vol. 97pp. 13-20, 2015
- [J-4] M. Rossi, A. Pandharipande, D. Caicedo, L. Schenato, A. Cenedese. **Personal lighting control with occupancy and daylight adaptation.** *Energy and Buildings*, vol. 105pp. 263--272, 2015
- [J-5] Carron, M. Todescato, R. Carli, L. Schenato. **An asynchronous consensus-based algorithm for estimation from noisy relative measurements.** *IEEE Trans. on Control of Network Systems*, vol.1(3), pp. 283-295, 2014
- [J-6] D. Varagnolo, G. Pillonetto, L. Schenato. **Distributed cardinality estimation in anonymous networks.** *IEEE Transactions on Automatic Control*, vol. 59(3), pp. 645-659, 2014
- [J-7] Chiuso, N. Laurenti, L. Schenato, A. Zanella. **LQG-like control of scalar systems over communication channels: the role of data losses, delays and SNR limitations.** *Automatica*, 50(12), pp. 3155--3163, 2014
- [J-8] S. Dey, A. Chiuso, L. Schenato. **Remote estimation with noisy measurements subject to packet loss and quantization noise.** *IEEE Transactions on Control of Network Systems*, vol. 1(3), pp. 204-217, 2014
- [J-9] D. Varagnolo, L. Schenato, G. Pillonetto. **A variation of the Newton-Pepys problem and its connections to size-estimation problems.** *Statistics & Probability Letters*, (83), pp. 1472-1478, 2013
- [J-10] D. Varagnolo, S. Del Favero, F. Dinuzzo, L. Schenato, G. Pillonetto. **Finding Potential Support Vectors in linearly separable classification problems.** *IEEE Transactions on Neural Networks and Learning Systems*, vol. 24(11), pp. 1799-1813, 2013
- [J-11] D. Varagnolo, G. Pillonetto, L. Schenato. **Distributed parametric and nonparametric regression with on-line performance bounds computation.** *Automatica*, vol. 48(10), pp. 2468 -- 2481, 2012
- [J-12] L. Schenato, F. Fiorentin. **Average TimeSynch: a consensus-based protocol for time synchronization in wireless sensor networks.** *Automatica*, vol. 47(9), pp. 1878-1886, 2011
- [J-13] Chiuso, F. Fagnani, L. Schenato, S. Zampieri. **Gossip algorithms for simultaneous distributed estimation and classification in sensor networks.** *IEEE Journal of Selected Topics in Signal Processing*, vol. 5(4), pp. 691 - 706, 2011
- [J-14] Chiuso, L. Schenato. **Information fusion strategies and performance bounds in packet-drop networks.** *Automatica*, vol. 47(7), pp. 1304-1316, 2011
- [J-15] R. Carli, A. Chiuso, L. Schenato, S. Zampieri. **Optimal Synchronization for Networks of Noisy Double Integrators.** *IEEE Transactions on Automatic Control*, vol. 56(5), pp. 1146-1152, 2011
- [J-16] S. Bolognani, S. Del Favero, L. Schenato, D. Varagnolo. **Consensus-based distributed sensor calibration and least-square parameter identification in WSNs.** *International Journal of Robust and Nonlinear Control*, vol. 20(2), 2010
- [J-17] D. Campolo, L. Schenato, L. Pi, X. Deng, E. Guglielmelli. **Attitude Estimation of a Biologically Inspired Robotic Housefly via Multimodal Sensor Fusion.** *Advanced Robotics*, vol. 23pp. 955--977, 2009
- [J-18] D. Campolo, G. Barbera, L. Schenato, L. Pi, X. Deng, E. Guglielmelli. **Attitude Stabilization of a Biologically Inspired Robotic Housefly via Dynamic Multimodal Attitude Estimation.** *Advanced Robotics*, vol. 23(15), pp. 2113--2138, 2009
- [J-19] P. Casari, A.P. Castellani, A. Cenedese, C. Lora, M. Rossi, L. Schenato, M. Zorzi. **The Wireless Sensor Networks for City-Wide Ambient Intelligence (WISE-WAI) Project.** *Sensors*, vol. 9pp. 4056--4082, 2009
- [J-20] L. Schenato. **To Zero or to Hold Control Inputs With Lossy Links?.** *IEEE Transactions on Automatic Control*, vol. 54pp. 1093--1099, 2009
- [J-21] R. Carli, A. Chiuso, L. Schenato, S. Zampieri. **Distributed Kalman filtering based on consensus strategies.**

*IEEE Journal on Selected Areas in Communications*, vol. 26pp. 622--633, 2008

- [J-22] L. Schenato. **Optimal estimation in networked control systems subject to random delay and packet drop.** *IEEE Transactions on Automatic Control*, vol. 53pp. 1311--1317, 2008
- [J-23] Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, S. Sastry. **Optimal linear LQG control over lossy networks without packet acknowledgment.** *Asian Journal of Control*, vol. 10pp. 3--13, 2008
- [J-24] S. Vitturi, L. Carreras, D. Miorandi, L. Schenato, A. Sona. **Experimental evaluation of an industrial application layer protocol over wireless systems.** *IEEE Transactions on Industrial Informatics*, vol. 3pp. 275--288, 2007
- [J-25] L. Schenato, B. Sinopoli, M. Franceschetti, K. Poolla, S. Sastry. **Foundations of control and estimation over lossy networks.** *Proceedings of the IEEE*, vol. 95pp. 163--187, 2007
- [J-26] L. Schenato, S. Zampieri. **On rendezvous control with randomly switching communication graphs.** *Networks and Heterogeneous Media*, vol. 2pp. 627--646, 2007
- [J-27] S. Oh, L. Schenato, P. Chen, S. Sastry. **Tracking and coordination of multiple agents using sensor networks: System design algorithms and experiments.** *Proceedings of the IEEE*, vol. 95pp. 234--254, 2007
- [J-28] X. Deng, L. Schenato, W. Wu, S. Sastry. **Flapping flight for biomimetic robotic insects: Part I - System modeling.** *IEEE Transactions on Robotics*, vol. 22pp. 776--788, 2006
- [J-29] X. Deng, L. Schenato, S. Sastry. **Flapping flight for biomimetic robotic insects: Part II - Flight control design.** *IEEE Transactions on Robotics*, vol. 22pp. 789--803, 2006
- [J-30] L. Schenato, W. Wu, S. Sastry. **Attitude control for a micromechanical flying insect via sensor output feedback.** *IEEE Transactions on Robotics and Automation*, vol. 20pp. 93--106, 2004
- [J-31] Sinopoli, L. Schenato, M. Franceschetti, K. Poolla, M. Jordan, S. Sastry. **Kalman filtering with intermittent observations.** *IEEE Transactions on Automatic Control*, vol. 49pp. 1453--1464, 2004
- [J-32] B. Sinopoli, C. Sharp, L. Schenato, S. Shaffert, S. Sastry. **Distributed Control Applications within Sensor Networks.** *Proceedings of the IEEE*, vol. 91(8), pp. 1235-1246, 2003

#### CHAPTERS IN BOOKS: published

- [B-1] F. Garin, L. Schenato. **A survey on distributed estimation and control applications using linear consensus algorithms.** *Networked Control Systems. Lecture Notes in Control and Inf. Scien.*, vol. 406, pp. 75-107, 2010

#### PEER REVIEWED CONFERENCES: published

- [C-1] S. Borile, A. Pandharipande, D. Caicedo, A. Cenedese, L. Schenato. **An identification approach to lighting control.** *European Control Conference 2016 (ECC'16)*, 2016
- [C-2] M. Todescato, A. Carron, R. Carli, L. Schenato, G. Pillonetto. **Machine Learning meets Kalman Filtering.** *55th IEEE Conference on Decision and Control (CDC'16)*, 2016
- [C-3] M. Todescato, A. Carron, R. Carli, A. Franchi, L. Schenato. **Multi-Robot Localization via GPS and Relative Measurements in the Presence of Asynchronous and Lossy Communication.** *European Control Conference 2016 (ECC'16)*, 2016
- [C-4] N. Bof, R. Carli, L. Schenato. **On the performances of consensus based versus Lagrangian based algorithms for quadratic cost functions.** *European Control Conference 2016 (ECC'16)*, 2016
- [C-5] N. Bof, M. Todescato, R. Carli, L. Schenato. **Robust Distributed Estimation for Localization in Lossy Sensor Networks.** *6th IFAC Workshop on Distributed Estimation and control in Networked Systems (NecSys16)*, 2016
- [C-6] M. Todescato, G. Cavararo, R. Carli, L. Schenato. **A Robust Block-Jacobi Algorithm for Quadratic Programming under Lossy Communications.** *5th IFAC Workshop on Distributed Estimation and control in Networked Systems (NecSys15)*, pp. 126--131, 2015
- [C-7] K. Yildirim, R. Carli, L. Schenato. **Adaptive Control-Based Clock Synchronization in Wireless Sensor Networks.** *European Control Conference ECC15*, 2015
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