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Education

The Australian National University

PHD IN ENGINEERING

- Thesis Title: Coordination and Control of Autonomous Agent Formations

Canberra, Australia

February 2007 - January 2011

Shiraz University

BSC. ELECTRICAL AND ELECTRONICS ENGINEERING – CONTROL ENGINEERING

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Publications

JOURNAL PAPERS

- [J1] A I Maass, C Manzie, **I Shames**, H Nakada, “Zeroth-order optimisation on subsets of symmetric matrices with application to MPC tuning“, to appear in the Transactions on Control Systems Technology, 2021.
- [J2] D Selvaratnam, M Cantoni, J Davoren, **I Shames**, “Sampling Polynomial Trajectories for LTL Verification” to appear in Theoretical Computer Science, 2021.
- [J3] O Biggar, M Zamani, **I Shames**, “An Expressiveness Hierarchy of Behavior Trees and Related Architectures“, in IEEE Robotics and Automation Letters, 2021.
- [J4] A Pavlov, **I Shames**, C Manzie, “Interior Point Differential Dynamic Programming” in IEEE Transaction on Control Systems Technology, 2021.
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- [J7] A Lesage-Landry, J A Taylor, **I Shames**, “Second-order Online Nonconvex Optimization“, to appear in IEEE Transactions on Automatic Control, 2021.
- [J8] Y Lin, **I Shames**, D Nešić, “Asynchronous Distributed Optimization via Dual Decomposition and Block Coordinate Subgradient Methods“, IEEE Transactions on Control of Network Systems, Vol. 8, No. 3, pp. 1348-1359, 2021.
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- [J10] A Ira, C Manzie, **I Shames**, R Chin, D Nešić, H Nakada, T Sano, “Tuning of multivariable model predictive controllers through expert bandit feedback“, to appear in International Journal of Control, 2020.
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- [J15] C Murguia, F Farokhi, **I Shames**, “Secure and Private Implementation of Dynamic Controllers Using Semi-Homomorphic Encryption“, IEEE Transactions on Automatic Control, Vol. 65, No. 9, pp 3950 – 3957, 2020.
- [J16] M Yuan, C Manzie, M Good, **I Shames**, L Ga, F Keynejad, T Robinette, “A Review of Industrial Tracking Control Algorithms“, Control Engineering Practice, Vol. 102, pp 104536, 2020.
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BOOK CHAPTERS

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- [B4] **I Shames**, B Fidan, B D O Anderson, and H Hmam, Position Location - Theory, Practice and Advances: A Handbook for Engineers and Academics, chapter 27, “Self-Localization of UAV Formations Using Bearing Measurements”, John Wiley & Sons, 2011.

CONFERENCE PAPERS

- [C1] E Michael, D Zelazo, T A Wood, C Manzie, **I Shames**, “Optimization with Zeroth-Order Oracles in Formation”, to appear in the Proceedings of the IEEE Conference on Decision and Control (CDC), 2020.
- [C2] M Taheri, K Khorasani, **I Shames**, N Meskin, “Undetectable Cyber Attacks on Communication Links in Multi-Agent Cyber-Physical Systems”, to appear in the Proceedings of the IEEE Conference on Decision and Control (CDC), 2020.
- [C3] D Burke, A Chapman, **I Shames**, “Generating Minimum-Snap Quadrotor Trajectories Really Fast”, to appear in the Proceedings of the 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2020).
- [C4] M Taheri, K Khorasani, **I Shames**, N Meskin, “Analysis of Cyber Attacks on Communication Links in Multi-Agent Systems”, to appear in the Proceedings of IEEE Conference on Control Technology and Applications (CCTA), Montreal, Canada, August, 2020
- [C5] G G Colabufo, P Dower, **I Shames**, “Newton’s method: sufficient conditions for practical and input-to-state stability”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C6] V Renganathan, **I Shames**, T H Summers, “Towards Integrated Perception and Motion Planning with Distributionally Robust Risk Constraints”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C7] M Zamani, **I Shames**, R Hunjet, “Distributed Signal Signature Minimization Via Network Topology Modification”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C8] C Murguia, **I Shames**, F Farokhi, D Nešić, “Privacy Against State Estimation: An Optimization Framework based on the Data Processing Inequality”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C9] M Khoo, T Wood, C Manzie, **I Shames**, “Exploiting Structure in the Bottleneck Assignment Problem”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C10] A Pavlov, M Müller, C Manzie, **I Shames**, “Complexity minimisation of suboptimal MPC without terminal constraints”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C11] R Chin, S I Maass, N Ulapane, C Manzie, **I Shames**, D Nešić, J Rowe, H Nakada, “Active Learning for Linear Parameter-Varying System Identification”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C12] A I Maass, C Manzie, **I Shames**, R Chin, D Nešić, N Ulapane, H Nakada, “Tuning of model predictive engine controllers over transient drive cycles”, to appear in IFAC World Congress, Berlin, Germany, July 2020.
- [C13] Y Lin, **I Shames**, D Nešić, “Asynchronous Distributed Optimization via Dual Decomposition and Block Coordinate Ascent”, in the Proc. of the IEEE Conference on Decision and Control (CDC), Nice, France, Dec. 2019.
- [C14] M Khoo, T Wood, C Manzie, **I Shames**, “Distributed Algorithm for Solving the Bottleneck Assignment Problem”, in the Proc. of the IEEE Conference on Decision and Control (CDC), Nice, France, Dec. 2019.
- [C15] H Nasir, E Weyer, **I Shames**, M Cantoni, “Towards Redundant Constraint Removal in Scenario Approximation of Optimal Control Problems with Multiplicative Model Uncertainty”, in the Proc. of the IEEE Conference on Decision and Control (CDC), Nice, France, Dec. 2019.
- [C16] W Wang, R Postoyan, D Nešić, **I Shames**, W P M H Heemels, “State-Feedback Event-Holding Control for Nonlinear Systems”, in the Proc. of the IEEE Conference on Decision and Control (CDC), Nice, France, Dec. 2019.
- [C17] M Yuan, C Manzie, L Gan, M Good, **I Shames**, “Modelling and Contouring Error Bounded Control of a Biaxial Industrial Gantry Machine”, in Proc. of The 3rd IEEE Conference on Control Technology and Applications (CCTA 2019), Hong Kong, 2019.
- [C18] A Pavlov, **I Shames**, C Manzie, “Enhancing computational efficiency for a class of NMPC solvers”, European Control Conference, Napoli, Italy, June 23 – 25, 2019.
- [C19] E Michael, T Wood, C Manzie, **I Shames**, “Uncertainty Intervals for Robust Bottleneck Assignment”, European Control Conference, Napoli, Italy, June 23 – 25, 2019.
- [C20] Z Ju, **I Shames**, D Nešić, “Communication Connectivity in Multi-agent Systems with Multiple Uncooperative Agents”, Asian Control Conference, Japan, June 09-11, 2019
- [C21] M Yuan, C Manzie, M Good, **I Shames**, F Keynejad, T Robinette, “Bounded Error Tracking Control for Contouring Systems with End Effector Measurements”, in the Proc. 20th IEEE International Conference on Industrial Technology (ICIT 2019), Melbourne, Australia, February 13-15, 2019.
- [C22] F Farokhi, **I Shames**, “Bilateral Trade under Information Asymmetry and Quantized Measurements”, in the Proc. of the IEEE Conference on Decision and Control (CDC), Fontainebleau, Miami Beach, FL, USA on Dec. 17-19, 2018.
- [C23] Y Lin, F Farokhi, **I Shames**, D Nešić, “Secure Control of Nonlinear Systems Using Semi-Homomorphic Encryption”, in the Proc. of the IEEE Conference on Decision and Control (CDC), Fontainebleau, Miami Beach, FL, USA on Dec. 17-19, 2018.
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- [C27] A S Ira, **I Shames**, C Manzie, R Chin, D Nešić, H Nakada, T Sano, “A Machine Learning Approach for Tuning Model Predictive Controllers”, in the Proc. of the 15th International Conference on Control, Automation, Robotics and Vision (ICARCV), Singapore, November 18 – 21, 2018.
- [C28] A Lang, **I Shames**, M Cantoni, “Structure in Total Least Squares Parameter Estimation for Electrical Networks”, in the Proc. of the 7th IFAC Workshop on Distributed Estimation and Control in Networked Systems, The Netherlands, Aug, 2018
- [C29] F Farokhi, **I Shames**, “Compressive Sensing in Fault Detection”, in the Proc. of the American Control Conference, Milwaukee, WI, USA, June 2018
- [C30] **I Shames**, A Dostovalova, J Kim, H Hmam, “Task Allocation and Motion Control for Threat-Seduction Decoys,” in the Proc. of the 56th IEEE Conference on Decision and Control, Melbourne, Australia, Dec, 2017
- [C31] D Selvaratnam, **I Shames**, D V Dimarogonas, J H Manton, B Ristić, “Co-operative Estimation for Source Localisation using Binary Sensors,” in the Proc. of the 56th IEEE Conference on Decision and Control, Melbourne, Australia, Dec, 2017
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- [C41] D D Selvaratnam, **I Shames**, B Ristic, J Manton, “The Effect of Sensor Modality on Posterior Cramer-Rao Bounds for Simultaneous Localisation and Mapping” to appear in the Proc. of the 9th IFAC Symposium on Intelligent Autonomous Vehicles, Messe Leipzig, Germany, June-July, 2016.
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Istanbul, Turkey, June 2013.

- [C60] T H Summers, **I Shames**, “Active Influence in Dynamical Models of Structural Balance in Social Networks”, Workshop for Information and Decisions in Social Networks (WIDS 2012), Cambridge, MA, November 2012.
- [C61] J Weimer, A Ahmadi, J Araujo, F Mele, D Papale, **I Shames**, H Sandberg, K H Johansson, “Active Actuator Fault Detection and Diagnostics in HVAC Systems”, Fourth ACM Workshop On Embedded Sensing Systems For Energy-Eciency In Buildings 2012, Toronto, Canada, November 2012.
- [C62] **I Shames**, T Charalambous, C Hadjicostis, M Johansson, “Distributed Network Size Estimation and Average Degree Estimation and Control in Networks Isomorphic to Directed Graphs”, In Proc. 50th Annual Allerton Conference on Communication, Control, and Computing, pp. 1885-1892, 2012.
- [C63] A Teixeira, **I Shames**, H Sandberg, K H Johansson, “Revealing Stealthy Attacks in Control Systems”, In Proc. of 50th Annual Allerton Conference on Communication, Control, and Computing, pp. 1806-1813, 2012.
- [C64] S A Ahmadi, **I Shames**, F Scotton, L Huang, H Sandberg, K H Johansson, B. Wahlberg, “Towards More Efficient Building Energy Management Systems”, In Proc. 7th International Conference on Knowledge, Information and Creativity Support Systems Melbourne, Australia, November 8 - 10, 2012.
- [C65] E Ghadimi, A M H Teixeira, **I Shames** and M Johansson, “On the Optimal Step-size Selection for the Alternating Direction Method of Multipliers”, In Proc. IFAC Workshop on Estimation and Control of Networked Systems, pp. 139-144, Santa Barbara, CA, USA, September, 2012.
- [C66] M Deghat, E Davis, T See, **I Shames**, B D O Anderson, C Yu, “Target Localization and Circumnavigation by a Non-holonomic Robot”, In the 2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2012), October 7-12, pp. 1227-1232, Vilamoura, Algarve, Portugal, 2012.
- [C67] **I Shames**, A M H Teixeira, H Sandberg, K H Johansson, “Distributed Fault Detection and Isolation with Imprecise Network Models”, In Proc. American Control Conference, pp. 5906-5911, Montreal, Canada, June, 2012.
- [C68] A N Bishop, **I Shames**, B. D. O. Anderson, “Stabilization of Rigid Formations with Direction-Only Constraints”, in 50th IEEE Conference on Decision and Control and European Control Conference (CDC-ECC), pp. 746-752, Orlando, USA, 2011.
- [C69] **I Shames**, A N Bishop, M Smith, B D O Anderson, “Target Velocity and Position Estimation Via Doppler Shift Measurements”, in the Australian Control Conference, pp 507-512, Melbourne, Australia, 2011.
- [C70] **I Shames**, A N Bishop, “Distributed Relative Clock Synchronization for Wireless Sensor Networks”, In 18th World Congress of the International Federation of Automatic Control, (IFAC 2011), Milan, Italy, 2011.
- [C71] **I Shames**, M Deghat, B D O Anderson, “Safe Formation Control and Coordination with Obstacle Avoidance”, In 18th World Congress of the International Federation of Automatic Control, (IFAC 2011), pp 11252 - 11257, Milan, Italy, 2011.
- [C72] M Deghat, **I Shames**, B D O Anderson, J M F Moura, “Distributed Localization Via Barycentric Coordinates: Finite-Time Convergence”, In 18th World Congress of the International Federation of Automatic Control, (IFAC 2011), pp 7824 - 7829, Milan, Italy, 2011.
- [C73] A N Bishop, **I Shames**, “Noisy Network Localization via Optimal Measurement Refinement Part 1: Bearing-Only Orientation Registration and Localization”, In 18th World Congress of the International Federation of Automatic Control, (IFAC 2011), pp. 8842-8846, Milan, Italy, 2011.
- [C74] **I Shames**, A N Bishop, “Noisy Network Localization via Optimal Measurement Refinement Part 2: Distance-Only Localization”, In 18th World Congress of the International Federation of Automatic Control, (IFAC 2011), pp. 8847-8853, Milan, Italy, 2011.
- [C75] E Ghadimi, M Johansson, **I Shames**, “Accelerated Gradient Methods for Networked Optimization”, Proc. American Control Conference, pp 1668-1673, San Fransisco, CA, June-July, 2011.
- [C76] A N Bishop, **I Shames**, “A Model for Optimal and Robust Control with Time-Varying Computing Constraints” Proc. 6th Int. Conf. on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. 217-222, Brisbane, Australia, December 2010.
- [C77] I Bayezit, B Fidan, M Amini, **I Shames**, “Cohesive Motion Control of Autonomous Formations in Three Dimensions”, Proc. 6th Int. Conf. on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. 205-210, Brisbane, Australia, December 2010.
- [C78] **I Shames**, A M H Teixeira, H Sandberg, K H Johansson, “Distributed Leader Selection without Direct Inter-agent Communication”, 2nd IFAC Workshop on Estimation and Control of Networked Systems, pages 221-226, Annecy, France, 2010.
- [C79] I Bayezit, M Amini, B Fidan, **I Shames**, “Cohesive Motion Control of Quadrotor Vehicle Formation”, Proceedings of the ASME 2010 International Mechanical Engineering Congress & Exposition, IMECE2010-40740, Vancouver, Canada, November 2010.
- [C80] M Deghat, **I Shames**, B D O Anderson, C Yu, “Target Localization and Circumnavigation Using Bearing Measurements in 2D”, in Proc. 49th IEEE Conference on Decision and Control, pp 334-339, Atlanta, GA, USA, 2010.
- [C81] **I Shames**, A M H Teixeira, H Sandberg, K H Johansson, “Distributed Fault Detection for Interconnected Second-Order Systems with Applications to Power Networks”, First Workshop on Secure Control Systems (SCS), Stockholm, Sweden, 2010
- [C82] **I Shames**, B D O Anderson, and B Fidan, “On the use of convex optimization in sensor network localization and synchronization”. in Proc. IFAC Workshop on Estimation and Control of Networked Systems, pages 228-233, Venice, Italy, 2009.
- [C83] **I Shames**, B D O Anderson, X F Wang, and B Fidan. “Network synchronizability enhancement using convex optimization”, in Proc. European Control Conference, pages 2067-2072, 2009.
- [C84] **I Shames**, S Dasgupta, B Fidan, and B D O Anderson. “Circumnavigation using distance measurements”, in Proc. European Control Conference, pages 2444-2449, Budapest, Hungary, 2009.
- [C85] R Soukieh, **I Shames**, and B Fidan. “Obstacle avoidance of non-holonomic unicycle robots based on Fluid mechanical modeling”, in Proc. European Control Conference, pages 3269-3274, Budapest, Hungary, 2009.
- [C86] R Soukieh, **I Shames**, and B Fidan. “Obstacle avoidance of robotic formations based on Fluid mechanical modeling”, in Proc. European Control Conference, pages 3263-3268, Budapest, Hungary, 2009.
- [C87] **I. Shames**, P T Bibalan, B Fidan, B D O Anderson, “Polynomial methods in noisy network localization”, in Proc. 17th Mediterranean Conference on Control and Automation, pp. 1307-1312, June 2009.
- [C88] G Piovan, **I Shames**, B Fidan, F Bullo, B D O Anderson, “On frame and orientation localization for relative sensing networks”, in Proc. 47th IEEE Conference on Decision and Control, pp. 2326-2331, Cancun, Mexico, December 2008.
- [C89] **I Shames**, B Fidan, B D O Anderson, “Close Target Reconnaissance Using Autonomous UAV Formations”, in Proc. 47th IEEE Conference on Decision and Control, pp. 1729-1734, Cancun, Mexico, December 2008.
- [C90] **I Shames**, B Fidan, B D O Anderson, “Reduction of Self-localization Errors in Multi-Agent Autonomous Formations”, in Proc. 17th World Congress of Int. Federation of Automatic Control (IFAC’08), pp. 6578-6583, Seoul, Korea, July 2008.
- [C91] **I Shames**, B Fidan, B D O Anderson, H Hmam, “Self-localization of Mobile Agents in the Plane”, in IEEE Int. Symposium on Wireless Pervasive

- Computing, pp. 116-120, Santorini, Greece, May 2008.
- [C92] **I Shames**, C Yu, B Fidan, B D O Anderson, “Externally Excited Coordination of Autonomous Formations”, in Proc. 15th Mediterranean Conference on Control and Automation, Athens, Greece, June 2007.
- [C93] C Yu, B Fidan, **I Shames**, S Sandeep, B D O Anderson, “Collision Free Coordination of Autonomous Multiagent System”, in Proc. European Control Conference, pp. 900-907, Kos, Greece, July 2007.
- [C94] **I Shames**, N Najmaei, M Zamani, A A Safavi, “A New Intelligent Traffic Shaper for High Speed Networks”, 18th IEEE International Conference on Tools for Artificial Intelligence, Arlington, VA, USA, 2006
- [C95] B Moghtaderi, **I Shames** and L Djenidi “Application of Micro-PIV Technique in Examining the Mixing Behaviour in a Novel Micro-reactor”, Fourth Australian Conference on Laser Diagnostics in Fluid Mechanics and Combustion, The University of Adelaide, South Australia, Australia, 2005.

Grants, Honors & Awards

2021 – 2024	Design of Real-time Optimisation Methods with Guaranteed Performance (DP210102454) , Australian Research Council	ARC
2021 – 2023	Hierarchical Verification of Autonomy Architectures (MyIP10266) , Defence Science & Technology Group	DSTG
2020 – 2022	Development and demonstration of technologies for a trusted autonomous vehicle capable of understanding its environment, adapting to it and acting in it , Trusted Autonomous Systems Defence CRC	D-CRC
2019	School of EMI Emerging Leader Award , University of Melbourne, School of Electrical, Mechanical, and Infrastructure Engineering	UniMelb, EMI
2020 – 2022	Co-design and dynamic mission optimisation of hypersonic flight vehicles , Australian Research Council and BAE Systems	ARC - BAES
2019 – 2022	NEURO-AUTONOMY: PERCEPTION, NAVIGATION AND SPATIAL AWARENESS FOR AUTONOMOUS ROBOTS (AUSMURI - Australia) US Defense Multidisciplinary University Research Initiative Program , DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE	AUSMURI
2019 – 2020	Verifiable Hierarchical Sensing, Planning and Control , AFOSR – Defence Science & Technology Group	AFOSR-DSTG
2019 - 2021	Trusted Scalable Effect Delivery by Expendable, Autonomous Swarms , Trusted Autonomous Systems Defence CRC	D-CRC
2019 – 2021	Protection/resilient control of cyber-physical systems against malicious attacks (G5479-MYP) , NATO Science for Peace and Security (SPS) Programme	NATO
2018 – 2020	Motion Planning and Task Allocation of Multiple Decoys for Ship Protection (Postdoc and PhD scholarships) , Defence Science & Technology Group	DSTG
2017 – 2019	Modeling, analysis and design of secure networked control systems (DP170104099) , Australian Research Council	ARC
2017 – 2018	Development of solution methods for coordinating multiple EW decoys for protection of naval task group against multiple threat missiles – with focus on motion planning and task allocation , Defence Science & Technology Group	DSTG
2017 – 2018	Tactical security and health in multi-modal sensor control and management , Defence Science & Technology Group	DSTG
2016 – 2019	Automatic control systems for low-energy pipelines in irrigation networks (LP160100666) , Australian Research Council	ARC
2016 – 2019	Practical model-based control for low emission and low cost diesel engines (LP160100650) , Australian Research Council	ARC
2016 – 2017	Tactical security and health management across intra-vehicle and inter-vehicle systems , Defence Science & Technology Group	DSTG
2015 – 2016	Demonstration of simultaneous localisation and mapping (SLAM) with compact sensors , Defence Science & Technology Group	DSTG
2016	Control engineering for high school students and teachers: an online platform development (IEEE-CSS Outreach Task Force) , , Institute of Electrical and Electronic Engineers (IEEE)	IEEE
2013 – 2016	Ensuring security and resilience in critical cyber-physical systems , McKenzie Fellowship, University of Melbourne	UoM
2013	Early Career Researcher Grant , University of Melbourne	UoM
2011 – 2012	ACCESS Linnaeus Postdoctoral Fellowship , KTH Royal Institute of Technology	KTH

2010	Selected as one of the 3 PhD Students from ANU to attend UniLead Leadership Program, The Australian National University	ANU
2010	International Alliance of Research Universities Travel Grant and Selected as 2 of PhD Students from ANU to Attend ANU-KU UniGo exchange program, The Australian National University	ANU
2008, 2010	Vice-Chancellor Travel Grant, The Australian National University	ANU
2008	International Alliance of Research Universities Travel Grant, The Australian National University	ANU
2008	ICE-EM/AMSI Financial Aid, ICE-EM/AMSI	AMSI
2008	Endeavor International Post-Graduate Research Scholarship (EIPRS), Endeavour Programme	EIPRS
2003 – 2005	Vice Chancellor’s Commendation for Academic Performance and Achievement, Shiraz University	ShirazU

Teaching Experience

Department of Electrical and Electronic Engineering, University of Melbourne

Melbourne, Australia

LECTURER AND SUBJECT COORDINATOR

2014 – present

Secure Cyber-physical Systems, ELEN90080

Summer/Autumn 2017

Power Electronics, ELEN90075

Winter/Spring 2015 – 2018

Introduction to Optimisation, ELEN90026

Winter/Spring 2013, 2014, 2016 – 2019

Embedded Systems Design, ELEN90066

Summer/Autumn 2020

School of Electrical Engineering, KTH Royal Institute of Technology

Stockholm, Sweden

CO-LECTURER, GRADUATE COURSE ON NETWORKED AND MULTI-AGENT CONTROL SYSTEMS, EL3330

2011

College of Engineering and Computer Science, The Australian National University

Canberra, Australia

TEACHING ASSISTANT

2014 – present

Engineering System Analysis

2008 – 2010

Control Systems

2009

Digital Signal Processing and Control

2007

Employment

ACADEMIC

The Australian National University

Canberra, Australia

Professor of Mechatronics

January 2021 – present

January 2021 – present

University of Melbourne

Melbourne, Australia

August 2012 – January 2021

Associate Professor and Control and Signal Processing Group Leader

January 2020 – January 2021

Senior Lecturer (Assistant Professor)

October 2014 – December 2019

McKenzie Fellow

January 2013 – January 2016

Research Fellow

August 2012 – January 2013

KTH Royal Institute of Technology

Stockholm, Sweden

POSTDOCTORAL RESEARCHER AT ACCESS LINNAEUS CENTRE

February 2011 – August 2012

NON-ACADEMIC

Burgmann College, The Australian National University

Canberra, Australia

ASSISTANT NETWORK ADMINISTRATOR

2008-2009

Foolade Shiraz Ltd.

Shiraz, Iran

NETWORKING CONSULTANT

2004 – 2005

Professional Activities and Service

January 2020 – present	Editorial Board Member , Automatica	
July 2019 – present	Editorial Board Member , IEEE Transactions on Control of Networked Systems	
November 2018 – present	Editorial Board Member , Control Engineering Practice	
June 2018	Co-chair and organiser of the invited sessions “Security & Privacy of Cyber-Physical Systems” (Parts 1 & 2) , American Control Conference (ACC 2018)	Milwaukee, USA
of the July 2022	International Program Committee (IPC) Member , 1st IFAC Conference on Networked Systems Necsys’22	Zurich, Switzerland
August 2018	Technical Program Committee Member , 7th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NecSys’18)	Groningen, The Netherlands
November 2016	Technical Program Committee Member , 13th International Symposium on Distributed Autonomous Robotic Systems (DARS 2016)	London, UK
September 2016	Technical Program Committee Member , 6th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NecSys’16)	Tokyo, Japan
December 2016	Co-chair and organiser of the invited session “Privacy in Complex Systems” , 54th IEEE Conference on Decision and Control (CDC 2015)	Osaka, Japan
November 2013	Technical Program Committee Member , Australian Control Conference, November 2013	Perth, Australia
November 2013	Technical Program Committee Member , 5th ACM Workshop On Embedded Systems For Energy-Efficiency In Buildings	Rome, Italy
August 2013	Technical Program Committee Member , 1st IEEE International Conference on Cyber-Physical Systems, Networks, and Applications	Taipei, Taiwan
September 2011	Co-chair and organiser of the invited session “New trends in networked systems: estimation, control, and security” , IFAC World Congress	Milan, Italy
January 2010	Co-chair and organiser , Symposium on Advances in Optimization for Distributed Control, Information Fusion and Sensor Network Applications and the Program Committee Member of The Sixth International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP)	Brisbane, Australia

Invited Talks

June 2019	Department of Electrical Engineering , Imperial College	London, UK
April 2019	Department of Electrical Engineering , Concordia	Montreal, Canada
April 2019	Department of Electrical and Electronic Engineering , University of Toronto	Toronto, Canada
April 2018	Department of Aerospace Engineering , TECHNION	Haifa, Israel
April 2018,		
June 2014,	Department of Automatic Control , KTH – Royal Institute of Technology,	Stockholm, Sweden
September 2009,		
March 2010		
May 2017	Department of Electrical and Electronic Engineering , University of Toronto	Toronto, Canada
June 2015,		
September 2016	School of Mechanical and Mining Engineering , University of Queensland	Brisbane, Australia
July 2012	Automatic Control Lab , ETH	Zürich, Switzerland
February 2012	Department of Electrical and Electronic Engineering , University of Melbourne	Melbourne, Australia
January 2012	School of Electrical Engineering and Computer Science , The University of Newcastle	Newcastle, Australia

October 2011	Gipsa-lab, Systèmes et Commandes en Réseaux, Département Automatique , University of Grenoble	<i>Grenoble, France</i>
September 2011	Delft Center for Systems and Control , Delft University of Technology	<i>Delft, The Netherlands</i>
September 2011	Institute of Automatic Control Engineering (LSR) , Technische Universitet München	<i>Münich, Germany</i>
July 2011	Department of Signals and Systems , Chalmers Institute of Technology	<i>Göteborg, Sweden</i>
June 2008	Department of Information and Physical Sciences , University of Tokyo	<i>Tokyo Japan</i>
January 2007	Intelligent Robot Research Center , Monash University	<i>Melbourne, Australia</i>

Referees

Available upon request.