

Konstantinos Gatsis

CONTACT

Address: School of Electronics and Computer Science
University of Southampton
B53 Room 4047
Highfield Campus
Southampton, SO17 1BJ, UK
E-mail: k.gatsis@soton.ac.uk
Web: <https://kgatsis.github.io/>

ACADEMIC APPOINTMENTS

Lecturer (Assistant Professor) Jan. 2024 -
School of Electronics and Computer Science
Cyber-Physical Systems Group
University of Southampton, Southampton, UK

Visiting Academic Jan. 2024 -
Department of Engineering Science
Control Engineering Group
University of Oxford, Oxford, UK

Departmental Lecturer (Fixed-term Assistant Professor) Dec. 2019 - Dec. 2023
Department of Engineering Science
Control Engineering Group
University of Oxford, Oxford, UK

Postdoctoral Researcher Oct.2016 - Oct.2019
Dept. of Electrical & Systems Engineering
GRASP (General Robotics, Automation, Sensing and Perception) Laboratory
PRECISE (Penn Research In Embedded Computing and Integrated Systems Engineering) Center
University of Pennsylvania, Philadelphia, PA

EDUCATION

PhD in Electrical & Systems Engineering Sept.2010 - Dec. 2016
University of Pennsylvania Philadelphia, PA
Thesis: Resource-aware Design of Wireless Control Systems
Advisor: Prof. George J. Pappas
Committee: Babak Hassibi (Caltech), Ali Jadbabaie (UPenn, currently MIT), Alejandro Ribeiro (UPenn)

Diploma in Electrical & Computer Engineering Sept. 2004 - May 2010
University of Patras Patras, Greece
Thesis: Robotic Vehicle Navigation
Advisor: Prof. Anthony Tzes

RESEARCH INTERESTS

Cyber-Physical Systems; Control and Optimization; Learning for Autonomous Systems; Next Generation Wireless Autonomous Applications; Security and Privacy

TEACHING EXPERIENCE - UNDERGRADUATE

Instructor, University of Oxford, UK

Robust Control (C20)	Hillary Term 2023
Dynamic Programming and Reinforcement Learning (C21)	Hillary Term 2023
Robust Control (C20)	Hillary Term 2022
Dynamic Programming and Reinforcement Learning (C21)	Trinity Term 2022
Robust Control (C20)	Hillary Term 2021
Dynamic Programming and Reinforcement Learning (C21)	Hillary Term 2021
Robust Control (C20)	Hillary Term 2020

Stipendiary Lecturer/Lecturer (Teaching) Oct.2020 - September 2022
 1st/2nd Year Engineering Mathematics, and Electronic and Information Engineering Tutorials (Small group teaching)
 Somerville College, University of Oxford, UK

TEACHING EXPERIENCE - POSTGRADUATE

Instructor, University of Oxford, UK Introduction to Modern Control - AIMS CDT	Hillary Term 2023
Instructor, University of Pennsylvania, Philadelphia, PA Special topics in ESE: Safe Learning for Control (ESE 680) with Professors Manfred Morari, George J. Pappas	Spring 2019
Special topics in ESE: Learning for Control (ESE 680) with Professors Manfred Morari, George J. Pappas	Spring 2018
Special topics in ESE: Dynamic Programming and Optimal Control (ESE 680)	Fall 2017
Teaching Assistant, University of Pennsylvania, Philadelphia, PA Control of Systems (ESE 406), Instructor: Prof. Bruce Kothmann Introduction to Optimization Theory (ESE 504), Instructor: Prof. Ali Jadbabaie	Spring 2013 Fall 2011

HONORS & AWARDS

IEEE Communications Society & Information Theory Society Joint Paper Award for the paper, "Age of Information in Random Access Channels," IEEE Transactions on Information Theory, Vol. 68, No. 10, pp. 6548-6568, October 2022.	2023
Best Readings in Communications in Wireless Networked Control Five journal papers selected in the list of best readings by the IEEE Communications Society.	2021
Best Student Paper Finalist (as co-author) 56th IEEE Conference on Decision and Control, Melbourne, Australia. Awarded to V. Tzoumas for the paper "Resilient Monotone Submodular Function Maximization".	2017
Young Author Prize Finalist (as co-author) 2017 IFAC World Congress, Toulouse, France. Awarded to A. Tsiamis for the paper "State Estimation with Secrecy against Eavesdroppers".	2017
Best Poster Award IoTDI Conference in CPSWeek 2017, Pittsburgh, PA, for the poster "Wireless Control for the IoT: Power, Spectrum, and Security Challenges".	2017
Joseph, D'16, and Rosaline Wolf Award for Best Doctoral Dissertation (co-recipient) Awarded annually for the best dissertation from a male Electrical and Systems Engineering Ph.D. Candidate of the University of Pennsylvania.	2016
O. Hugo Schuck Best Paper Award (Theory)	2014

Awarded by the American Automatic Control Council to the two best papers (theory and application) presented at the 2013 American Control Conference. For the paper "Optimal Power Management in Wireless Control Systems".

Best Paper Award Finalist 2014
ACM/IEEE 5th International Conference on Cyber-Physical Systems (ICCPS 2014), Berlin, Germany, for the paper "Opportunistic Scheduling of Control Tasks Over Shared Wireless Channels".

Student Best Paper Award 2013
2013 American Control Conference (ACC 2013) for the paper "Optimal Power Management in Wireless Control Systems".

Student Travel Support
54th IEEE Conference on Decision and Control (CDC 2015), Osaka, Japan
ACM/IEEE 5th International Conference on Cyber-Physical Systems (ICCPS 2014), Berlin, Germany

SUPERVISION

Graduate (Current), Univ. of Oxford
Andre Bertolace (with Prof. K Margellos), Doctoral Student (DPhil), Part-time Oct 2021 - Present
Ondrej Bajgar (with Profs. A. Abate, M. Osborne), Doctoral Student (DPhil) Oct 2021 - Present
Keyan Miao (with Prof. A. Papachristodoulou), Doctoral Student (DPhil) Oct 2021 - Present
Liqun Zhao (with Prof. A. Papachristodoulou), Doctoral Student (DPhil) Oct 2021 - Present

Graduate (Past), Univ. of Oxford
Patrick Benjamin (with Prof. K Margellos), AIMS CDT Mini-Project Apr 2022 - June 2022
Ondrej Bajgar (with Prof. A. Abate), AIMS CDT Mini-Project Apr 2021 - June 2021

Undergraduate (Past), Univ. of Oxford
Ali (Bora) Aydin (with Prof. A. Papachristodoulou), 4YP, Oct 2023 - Dec 2023
James Craik (with Prof. K Margellos), 4YP, Oct 2023 - Dec 2023

Undergraduate (Past), Univ. of Oxford
Oliver Gates, 4YP, Oct 2022 - May 2023
Edward Gunn, 4YP, Oct 2022 - May 2023
Xuyang Zhao, 4YP, Oct 2022 - May 2023
Jingyi Huang (with Prof. K. Margellos), Summer Project (EUROP) Jun - Aug 2022
George Whittle, Summer Project (EUROP) Jun - Aug 2022
Toby Lam (with Prof. K Margellos), 4YP, Oct 2021 - May 2022
Michael Harris, 4YP, Oct 2021 - May 2022
Oscar Powell, 4YP, Oct 2021 - May 2022
Jia Emily Tsen, 4YP, Oct 2020 - May 2021
Oliver Farquharson, 4YP, Oct 2020 - May 2021
Shenqi Ye (with Prof. Noa Zilberman), Summer project July - Aug 2020

PUBLICATIONS (Total Citation Count: 1133, Google Scholar, Sept 2023)

Book Chapters

[B-1] K. Gatsis and G. J. Pappas. Reinforcement learning for control using value function approximation. In J. Baillieul and T. Samad, editors, *Encyclopedia of Systems and Control*. Springer, London, 2020

Submitted/ In preparation

[P-1] M. Pezzutto, S. Dey, E. Garone, K. Gatsis, K. H. Johansson, and L. Schenato. Wireless control: Retrospective and open vistas. 2024. Submitted

- [P-2] A. Bertolace, K. Margellos, and K. Gatsis. Sample complexity bounds for probabilistically robust adversarial machine learning. In *TBD*, 2023. In preparation
- [P-3] K. Miao and K. Gatsis. Towards optimal network depths: Control-informed acceleration of training and inference in neural ODEs. In *TBD*, 2023. In preparation

Journal Papers

- [J-1] V. L. Silva, M. Eisen, K. Gatsis, and A. Ribeiro. Model-free design of control systems over wireless fading channels. *Signal Processing*, 197:108540, 2022
- [J-2] X. Chen, K. Gatsis, H. Hassani, and S. S. Bidokhti. Age of information in random access channels. *IEEE Transactions on Information Theory*, 2022
- [J-3] K. Gatsis and G. J. Pappas. Statistical learning for analysis of networked control systems over unknown channels. *Automatica*, 125:109386, 2021
- [J-4] A. B. Alexandru, K. Gatsis, Y. Shoukry, S. A. Seshia, P. Tabuada, and G. J. Pappas. Cloud-based quadratic optimization with partially homomorphic encryption. *IEEE Transactions on Automatic Control*, 66(5):2357–2364, 2021
- [J-5] K. Gatsis, H. Hassani, and G. J. Pappas. Latency-reliability tradeoffs for state estimation. *IEEE Transactions on Automatic Control*, 66(3):1009–1023, 2021
- [J-6] A. Tsiamis, K. Gatsis, and G. J. Pappas. State-secrecy codes for networked linear systems. *IEEE Transactions on Automatic Control*, 65(5):2001–2015, 2020
- [J-7] M. Eisen, M. M. Rashid, K. Gatsis, D. Cavalcanti, N. Himayat, and A. Ribeiro. Control aware radio resource allocation in low latency wireless control systems. *IEEE Internet of Things Journal*, 6(5):7878–7890, 2019
- [J-8] M. Eisen, K. Gatsis, G. J. Pappas, and A. Ribeiro. Learning in wireless control systems over non-stationary channels. *IEEE Transactions on Signal Processing*, 67(5):1123–1137, 2019
- [J-9] K. Gatsis, A. Ribeiro, and G. J. Pappas. Random access design for wireless control systems. *Automatica*, 91:1 – 9, May 2018
- [J-10] K. Gatsis, M. Pajic, A. Ribeiro, and G. J. Pappas. Opportunistic control over shared wireless channels. *IEEE Transactions on Automatic Control*, 60(12):3140–3155, December 2015
- [J-11] K. Gatsis, A. Ribeiro, and G. J. Pappas. Optimal power management in wireless control systems. *IEEE Transactions on Automatic Control*, 59(6):1495–1510, June 2014

Workshops

- [P-1] K. Miao and K. Gatsis. Towards optimal network depths: Control-informed acceleration of training and inference in neural ODEs. In *NeurIPS Workshop on The Symbiosis of Deep Learning and Differential Equations III (DLDE)*, 2023. Poster. To appear. Available on OpenReview

Conference Papers

- [C-1] O. Gates, M. Newton, and K. Gatsis. Scalable forward reachability analysis of multi-agent systems with neural network controllers. In *62nd IEEE Conference on Decision and Control*, 2023. To appear. Available on Arxiv
- [C-2] A. Bertolace, K. Margellos, and K. Gatsis. Homomorphically encrypted gradient descent algorithms for quadratic programming. In *62nd IEEE Conference on Decision and Control*, 2023. To appear. Available on Arxiv
- [C-3] L. Zhao, K. Gatsis, and A. Papachristodoulou. Stable and safe reinforcement learning via a barrier-lyapunov actor-critic approach. In *62nd IEEE Conference on Decision and Control*, 2023. To appear. Available on Arxiv
- [C-4] K. Miao and K. Gatsis. Learning robust state observers using Neural ODEs. In *Learning for Dynamics and Control Conference (LADC)*, 2023
- [C-5] K. Gatsis. Federated reinforcement learning at the edge: Exploring the learning-communication tradeoff. In *European Control Conference (ECC)*, 2022

- [C-6] K. Gatsis. Linear regression over networks with communication guarantees. In *3rd Annual Learning for Dynamics & Control Conference*, 2021
- [C-7] K. Gatsis. Adaptive scheduling for machine learning tasks over networks. In *2021 American Control Conference (ACC)*, 2021
- [C-8] X. Chen, K. Gatsis, H. Hassani, and S. S. Bidokhti. Age of information in random access channels. In *IEEE International Symposium on Information Theory (ISIT)*, 2020
- [C-9] V. L. Silva, M. Eisen, K. Gatsis, and A. Ribeiro. Resource allocation in large-scale wireless control systems with graph neural networks. In *IFAC World Congress*, 2020
- [C-10] H. Hu, K. Gatsis, M. Morari, and G. J. Pappas. Non-cooperative distributed MPC with iterative learning. In *IFAC World Congress*, 2020
- [C-11] K. Gatsis and G. J. Pappas. Learning to control over unknown wireless channels. In *IFAC World Congress*, 2020
- [C-12] V. L. Silva, M. Eisen, K. Gatsis, and A. Ribeiro. Resource allocation in wireless control systems via deep policy gradient. In *2020 IEEE 21st International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, 2020
- [C-13] H. Hu, K. Gatsis, M. Morari, and G. J. Pappas. Tuning communication latency for distributed model predictive control. In *8th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NecSys)*, 2019
- [C-14] M. Eisen, M. M. Rashid, K. Gatsis, D. Cavalcanti, N. Himayat, and A. Ribeiro. Control aware communication design for time sensitive wireless systems. In *2019 IEEE International Conference on Acoustics, Speech and Signal Processing*, 2019
- [C-15] A. Tsiamis, K. Gatsis, and G. J. Pappas. An information matrix approach for state secrecy. In *57th IEEE Conference on Decision and Control (CDC 2018)*, Miami Beach, FL, 2018
- [C-16] K. Gatsis and G. J. Pappas. Sample complexity of networked control systems over unknown channels. In *57th IEEE Conference on Decision and Control (CDC 2018)*, Miami Beach, FL, 2018
- [C-17] M. Eisen, K. Gatsis, G. J. Pappas, and A. Ribeiro. Learning in non-stationary wireless control systems via newton's method. In *American Control Conference 2018 (ACC 2018)*, Milwaukee, WI, 2018
- [C-18] A. Tsiamis, K. Gatsis, and G. J. Pappas. State-secrecy codes for stable systems. In *American Control Conference 2018 (ACC 2018)*, Milwaukee, WI, 2018
- [C-19] N. J. Watkins, K. Gatsis, M. Morari, and G. J. Pappas. Scenario-based model predictive control for energy harvesting actuators. In *American Control Conference 2018 (ACC 2018)*, Milwaukee, WI, 2018
- [C-20] M. Eisen, K. Gatsis, G. J. Pappas, and A. Ribeiro. Optimization of switched linear systems over non-stationary wireless channels. In *2018 IEEE 19th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC)*, 2018
- [C-21] M. Eisen, K. Gatsis, G. J. Pappas, and A. Ribeiro. Learning statistically accurate resource allocations in non-stationary wireless systems. In *2018 IEEE International Conference on Acoustics, Speech and Signal Processing*, 2018
- [C-22] A. Alexadru, K. Gatsis, and G. J. Pappas. Privacy preserving cloud-based quadratic optimization. In *55th Annual Allerton Conference on Communication, Control, and Computing*, October 2017
- [C-23] V. Tzoumas, K. Gatsis, A. Jadbabaie, and G. J. Pappas. Resilient monotone submodular function maximization. In *56th IEEE Conference on Decision and Control (CDC 2017)*, Melbourne, Australia, December 2017 [**Best Student Paper Finalist for V. Tzoumas**]
- [C-24] A. Tsiamis, K. Gatsis, and G. J. Pappas. State estimation codes for perfect secrecy. In *56th IEEE Conference on Decision and Control (CDC 2017)*, Melbourne, Australia, December 2017
- [C-25] N. J. Watkins, K. Gatsis, C. Nowzari, and G. J. Pappas. Battery management for control systems with energy harvesting sensors. In *56th IEEE Conference on Decision and Control (CDC 2017)*, Melbourne, Australia, December 2017

- [C-26] A. Tsiamis, K. Gatsis, and G. J. Pappas. State estimation with secrecy against eavesdroppers. *IFAC-PapersOnLine*, 50(1):8385 – 8392, July 2017. 20th IFAC World Congress, Toulouse, France [[Young Author Prize Finalist for A. Tsiamis](#)]
- [C-27] Y. Shoukry, K. Gatsis, A. Alanwar, G. J. Pappas, S. A. Seshia, M. Srivastava, and P. Tabuada. Privacy-aware quadratic optimization using partially homomorphic encryption. In *55th IEEE Conference on Decision and Control (CDC 2016)*, Las Vegas, NV, December 2016
- [C-28] K. Gatsis, A. Ribeiro, and G. J. Pappas. State-based communication design for wireless control systems. In *55th IEEE Conference on Decision and Control (CDC 2016)*, Las Vegas, NV, December 2016
- [C-29] K. Gatsis, A. Ribeiro, and G. J. Pappas. Control-aware random access communication. In *Proc. of the ACM/IEEE 7th International Conference on Cyber-Physical Systems (ICCPS 2016)*, Vienna, Austria, April 2016
- [C-30] K. Gatsis, A. Ribeiro, and G. J. Pappas. Control with random access wireless sensors. In *Proc. of the 54th IEEE Conference on Decision and Control (CDC 2015)*, Osaka, Japan, December 2015
- [C-31] K. Gatsis, A. Ribeiro, and G. J. Pappas. Decentralized channel access for wireless control systems. In *Proc. of the 5th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NecSys)*, Philadelphia, PA, September 2015
- [C-32] K. Gatsis, U. Topcu, and G. J. Pappas. Value of forecasts in planning under uncertainty. In *Proc. of the 2015 American Control Conference (ACC 2015)*, Chicago, IL, July 2015
- [C-33] K. Gatsis, M. Pajic, A. Ribeiro, and G. J. Pappas. Opportunistic sensor scheduling in wireless control systems. In *Proc. of the 53rd IEEE Conference on Decision and Control (CDC 2014)*, Los Angeles, CA, December 2014
- [C-34] K. Gatsis, M. Pajic, A. Ribeiro, and G. J. Pappas. Opportunistic scheduling of control tasks over shared wireless channels. In *Proc. of the ACM/IEEE 5th International Conference on Cyber-Physical Systems (ICCPS 2014)*, Berlin, Germany, April 2014 [[Best Paper Award Finalist](#)]
- [C-35] K. Gatsis, M. Pajic, A. Ribeiro, and G. J. Pappas. Power-aware communication for wireless sensor-actuator systems. In *Proc. of the 52nd IEEE Conference on Decision and Control (CDC 2013)*, Florence, Italy, December 2013
- [C-36] K. Gatsis, A. Ribeiro, and G. J. Pappas. Optimal power management in wireless control systems. In *Proc. of the 2013 American Control Conference (ACC 2013)*, Washington DC, June 2013 [[O. Hugo Schuck Best Paper Award, Student Best Paper Award](#)]
- [C-37] G. Siamantas, K. Gatsis, and A. Tzes. Mobile robot-assisted cellular environment coverage. In *Proc. of the 6th IFIP International Conference on Artificial Intelligence Applications and Innovations (AIAI 2010)*, Larnaca, Cyprus, October 2010

Other Publications

- [O-1] K. Gatsis and G. J. Pappas. Optimization, learning, and control for the internet-of-things. In *Princeton Day of Optimization*, Princeton, NJ, September 2018. Poster
- [O-2] K. Gatsis and G. J. Pappas. Secure and resource-efficient monitoring and control for the IoT. In *'Meet the Faculty Candidate' Poster Session, 56th IEEE Conference on Decision and Control (CDC 2017)*, Melbourne, Australia, December 2017. Poster
- [O-3] K. Gatsis, A. Ribeiro, and G. J. Pappas. Power and spectrum optimization for wireless autonomous systems. In *DIMACS Workshop on Distributed Optimization, Information Processing, and Learning*, Rutgers University, New Brunswick, NJ, August 2017. Poster
- [O-4] K. Gatsis and G. J. Pappas. Wireless control for the IoT: Power, spectrum, and security challenges. In *2nd IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI), CPSWeek 2017*, Pittsburgh, PA, April 2017. Poster [[Best Poster Award](#)]
- [O-5] K. Gatsis, A. Ribeiro, and G. J. Pappas. Optimal design principles for wireless control systems. In *'Meet the Faculty Candidate' Poster Session, 55th IEEE Conference on Decision and Control (CDC 2016)*, Las Vegas, NV, December 2016. Poster

- [O-6] K. Gatsis, M. Pajic, A. Ribeiro, and G. J. Pappas. Optimal resource management in wireless control systems. In *2014 NSF Cyber-Physical Systems Principal Investigators' Meeting*, Arlington, VA, November 2014. Poster

SELECTED TALKS

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| Seminar, Department of Electrical Engineering and Computer Science,
University of California - Irvine, USA | February 2023 |
| Seminar, Control Engineering Group, University of Cambridge, UK | February 2023 |
| Seminar, ELO-X Embedded Learning and Optimisation Workshop, Leuven, Belgium | April 2022 |
| Seminar (remote), Information Processing and Communications Lab,
Imperial College London, UK | May 2021 |
| Seminar (remote), CRAN, Université de Lorraine (Nancy, France) | Apr. 2021 |
| Talk (remote), Oxford-Man Institute Machine Learning Workshop, Oxford, UK | Dec. 2020 |
| Seminar (remote), Control Systems Seminar, University of Manchester, UK | Dec. 2020 |
| Seminar (remote), Toshiba Research Europe, UK | Nov. 2020 |
| Seminar (remote), Department of Automatic Control and Systems Engineering,
University of Sheffield, UK | Oct. 2020 |
| Seminar, Department of Electrical & Systems Engineering,
Washington University in St. Louis, St. Louis, MO | Apr. 2019 |
| Seminar, Department of Electrical & Computer Engineering,
Northeastern University, Boston, MA | Mar. 2019 |
| Seminar, Department of Electrical, Computer & Energy Engineering,
University of Colorado Boulder, CO | Mar. 2019 |
| Seminar, Department of Electrical & Computer Engineering,
University of Toronto, Canada | Mar. 2019 |
| Seminar, Department of Electrical & Computer Engineering,
University of California Riverside, Riverside, CA | Mar. 2019 |
| Seminar, Polytechnic School, Arizona State University, Tempe, AZ | Feb. 2019 |
| Seminar, Department of Electrical & Computer Engineering,
University of Illinois at Chicago, Chicago, IL | Feb. 2019 |
| Invited talk at Information Theory and Applications (ITA) Workshop, San Diego, CA | Feb. 2019 |
| Seminar, Online, Intel Science and Technology Center for Wireless Autonomous Systems | Dec. 2018 |
| Seminar, Link Lab, University of Virginia, Charlottesville, VA | Apr. 2018 |
| Seminar, Department of Electrical Engineering,
Columbia University, New York, NY | Mar. 2018 |

Seminar, Department of Electrical & Computer Engineering, University of Michigan, Ann Arbor, MI	Jan. 2018
Invited talk at Modeling and Optimization: Theory and Applications (MOPTA) Conference, Lehigh University, Bethlehem, PA	Aug. 2016
CCSP Seminar, University of Maryland, College Park, MD	Mar. 2016
ISS Seminar, Harvard University, Cambridge, MA	Feb. 2016
Invited talk at Information Theory and Applications (ITA) Workshop, San Diego, CA	Feb. 2016
PhD Colloquium, Electrical & Systems Engineering, University of Pennsylvania	Aug. 2015

ACADEMIC SERVICE

Doctoral Thesis Examiner

Zijing Wang, University of Oxford, UK, July 2023
 Tahmoores Farjam, University of Aalto, Finland, December 2022
 Jingyue Lu, University of Oxford, UK, January 2022
 Natascha Harth, University of Glasgow, UK, August 2021

Doctoral Progress Examiner, University of Oxford

Patrick Benjamin, Confirmation of Status, Sept 2023
 Han Wang, Confirmation of Status, Sept 2023, Transfer of Status, Nov 2021
 Yana Lishkova, Confirmation of Status, Sept 2022, Transfer of Status, Oct 2020
 Martin Doff-Sotta, Confirmation of Status, Sept 2022, Transfer of Status, Oct 2020
 Olivia Gallupova, Transfer of Status, Nov 2022
 Alec Edwards, Transfer of Status, Sept 2021

PUBLIC ENGAGEMENT ACTIVITIES

Open Days, Department of Engineering Science, Univ. of Oxford Quadcopter arena experimental platform	2022
Siemens Innovation Ecosystem Website article. Robust and Resilient Smart Mobility. K. Gatsis, D. Gohlich, S. Park, T. Son. Available online	2022

PERSONAL DEVELOPMENT

Innovation Leadership Programme, Univ. of Oxford,	2021
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REVIEWING ACTIVITIES

Peer Reviewer

Engineering and Physical Sciences Research Council (EPSRC), UK
 Research Grants Council (RGC), Hong Kong

Journal Reviewer

IEEE Transactions on Automatic Control, Automatica, IEEE Control Systems Magazine, IEEE Transactions on Signal Processing, IEEE Transactions on Power Systems, IEEE Transactions on Wireless Communications, IEEE Journal of Selected Topics in Signal Processing, ACM Transactions on Cyber-Physical Systems, IEEE Transactions on Control of Network Systems, IEEE Embedded Systems Letters, IEEE Control Systems Letters, IEEE Communications Letters

Conference Reviewer

Conference on Robot Learning 2020, On multiple occasions for IEEE Conference on Decision and

Control, American Control Conference, Cyber-Physical Systems Week, European Control Conference, IFAC World Congress

PROFESSIONAL ACTIVITIES

Local Publicity Chair July 2024
Conference on Learning for Dynamics and Control (L4DC), Oxford, UK

Seminar Organizer Jan. 2020 - May 2022
Control Group Seminar Series, Department of Engineering Science, University of Oxford, UK

Workshop Organizer Dec. 2021
Workshop on Distributed Learning and Multi-agent Learning
During 60th IEEE Conference on Decision and Control (Online), December 12, 2021
Co-organizers: Vijay Gupta, University of Notre Dame, USA. Number of Participants: 135

Workshop on Learning for Control Dec. 2018
During 57th IEEE Conference on Decision and Control, Miami Beach, Florida, December 16, 2018
Co-organizers: Pramod P. Khargonekar, Manfred Morari, George J. Pappas. Estimated Number of Participants: 150-200

Program Committee Member
Annual Learning for Dynamics & Control Conference (L4DC), 2021 - Present
9th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NECSYS), 2022

Associate Editor
American Control Conference (2021 - Present), IEEE Conference on Decision and Control (2021 - Present)

Conference Session Organizer July 2020
Open Invited Session on "Control for Next Generation Wireless Networks", 2020 IFAC World Congress, Berlin, Germany
Co-organizers: D. Baumann, K. H. Johansson, S. Trimpe

Member Aug. 2020 - Present
Conference Editorial Board, IEEE Control Systems Society

Member
Institute of Electrical and Electronics Engineers (IEEE)

Member
Engineering and Physical Sciences Research Council (EPSRC) Associate Peer Review College

FUNDING

Applications Pending
UK EPSRC Standard Grant, "Edgy Organism", Start date: February 2024 (tentative), 30 months, Role: Co-PI. Total value: 1.7M GBP (2.1M USD), Share ~300K GBP (380K USD)).
Status: Received offer letter

Past
Trilateral Seed Funding – University of Oxford, TU Berlin, Siemens Digital Industries
"Robust and Resilient Digital Twin of Connected Mobility for Safety and Energy Efficiency"
Mar 2022 – Dec 2022, Role: Co-PI, Total value: 33K GBP/37K EUR