

Curriculum Vitae

Dimos V. Dimarogonas, PhD

Office Address

School of Electrical Engineering and Computer Science (EECS)
Decision and Control Systems
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Date of Birth: June 17th, 1978, Athens, GREECE

Citizenship: Greek/Swedish

EDUCATION

PhD in Mechanical Engineering: **National Technical University of Athens**
Athens, GREECE (3/2002-3/2007)

Dissertation Title: *“Development of Decentralized Hybrid Control Methodologies with Application to the Collision Avoidance Problem”*

Advisor: Prof. Kostas Kyriakopoulos

Eng. Diploma: **National Technical University of Athens** Athens, GREECE

Diploma in Electrical and Computer Engineering, Telecommunications Section
(9/1996-9/2001)

Dipl. Thesis Title: *“Max-Plus Control of Discrete-Event Dynamical Systems”*

Advisor: Prof. Petros Maragos

GPA: 8.15/10.0.

Docent in Automatic Control, **KTH Royal Institute Of Technology**, 2012.

RESEARCH INTERESTS

Multi-Agent Systems, Autonomous Robots, Networked Control, Hybrid Systems and Control, Distributed Formal Methods, Network Inference, Biological Networks.

PROFESSIONAL EXPERIENCE

Decision and Control Systems, School of Electrical Engineering and Computer Science (EECS), KTH Royal Institute Of Technology

Stockholm, SWEDEN

5/2017-

Professor

Automatic Control Dept., School of Electrical Eng., KTH Royal Inst. Of Technology

Stockholm, SWEDEN

4/2014-4/2017

Associate Professor, (Swedish: Universitetslektor)

Automatic Control Dept., School of Electrical Eng., KTH Royal Inst. Of Technology

Stockholm, SWEDEN

10/2010- 3/2014

Assistant Professor, (Swedish: Bitr. Universitetslektor)

Greek Army (Στρατός Ήλλάδας), fulfillment of compulsory military service

Greece

5/2010-9/2010

Laboratory for Information and Decision Systems, Massachusetts Inst. Of Technology (MIT)

Cambridge, MA, USA

2/2009-3/2010:

Post Doctoral Research Associate

Research Supervisor: Professor Emilio Frazzoli.

Automatic Control Dept., School of Electrical Eng., KTH Royal Inst. Of Technology

Stockholm, SWEDEN

5/2007-2/2009:

KTH ACCESS Postdoc (selected among 100 candidates both in 2007 and 2008)

Research Supervisor: Professor Karl Henrik Johansson.

Control Sys. Lab., Mech. Eng. Dept., National Tech. Univ. of Athens

Athens, GREECE

3/2002-3/2007:

PhD Candidate

Advisor: Professor Kostas J. Kyriakopoulos.

ACTIVITIES

PROJECTS

Nordforsk Sustainable Forests project INFORM, Principal Investigator (PI), 2026-2029.

Digital Futures Flagship project, “Human-in-the-loop Autonomy via hybrid Games (HÅG): From theory to deployment in extreme environments”, Principal Investigator (PI), 2026-2029.

Digital Futures/VINNOVA project, I-SEE (Integrated Aerial–Surface–Subsurface Autonomy for Extreme Environments), Principal Investigator (PI), 2026-2029.

Digital Futures/VINNOVA project, ”Synergistiskt människa-robot-samarbete i extrema miljöer (SHARCEX)”, Principal Investigator (PI), 2024-2027.

SSF-NRF Korea research collaboration project, “Resilient cooperative manipulation”, Principal Investigator (PI), 2024-2027.

Swedish Research Council (VR), “Simultaneous Network Identification and Spatiotemporal Task Planning for Multi-agent Systems”, Principal Investigator (PI), 2024-2027.

Horizon Europe EIC Project SymAware, “Symbolic logic framework for situational awareness in mixed autonomy”, Horizon Europe Programme of the European Commission, Principal Investigator (PI), 2022-2025.

Wallenberg Autonomous Systems Program WASP NEST Project DISCOWER “Distributed Control in Weightless Environments”, Coordinator and Principal Investigator (PI), 2022-2027.

WASP-DDLS (Data-Drive Life Science) Project, “Understanding the human immune cell interaction network”, WASP Principal Investigator (PI), 2022-2024.

Digital Futures Partner Innovation Project, “Towards Safe Smart Construction: Algorithms, Digital Twins and Infrastructures”, Principal Investigator (PI), 2022-2025.

EU H2020 Project CANOPIES, “A Collaborative Paradigm for Human Workers and Multi-Robot Teams in Precision Agriculture Systems”, H2020 Programme of the European Commission, Principal Investigator (PI), 2021-2024.

ERC Consolidator Grant LEAFHOUND, H2020, “Leader-follower hybrid control and task planning for multi-agent systems under spatiotemporal logic specifications”, Principal Investigator (PI), 2020-2025.

Swedish Research Council (VR), “Refinable Hybrid Control Synthesis for Multi-agent Systems”, Principal Investigator (PI), 2018-2022.

Wallenberg Autonomous Systems Program WASP-NTU Collaboration Project, “Scalable Multi-Robot Sensor Fusion, Localization, Navigation, and Control”, KTH Principal Investigator (PI), 2018-2021.

Wallenberg Academy Fellow grant, Principal Investigator (PI), 2016-2021. Granted Prolongation, 2022-2027.

ERC Starting Grant BUCOPHSYS, H2020, “Bottom-up hybrid control and planning synthesis with application to multi-robot multi-human coordination”, Principal Investigator (PI), 2015-2020.

SSF Smart Systems COIN, “Co-adaptive human-robot interactive systems”, Swedish Foundation for Strategic Research 2015 Smart Systems Call, Coordinator and Principal Investigator (PI), 2016-2021.

EU H2020 Project Co4Robots, “Achieving Complex Collaborative Missions via Decentralized Control and Coordination of Interacting Robots”, H2020 Programme of the European Commission, Coordinator and Principal Investigator (PI), 2017-2020.

Knut and Alice Wallenberg Foundation Project IPSYS, “Interactive Physical Systems: Moduli Spaces, Inference and Control”, co-Principal Investigator (co-PI), 2015-2020.

EU H2020 Project AEROWORKS, “Collaborative Aerial Workers”, Principal Investigator (PI), 2015-2018.

Swedish Research Council (VR), “Robust hybrid controller synthesis for multi-agent systems from local task specifications”, Principal Investigator (PI), 2014-2018.

SRA ICT TNG Faculty project TouCHES, 1.5 MSEK, Principal Investigator (PI), Coordinator: Prof. Carlo Fischione, SRA ICT TNG Program, 2016-2019.

SRA ICT TNG Faculty project STaRT, 1.5 MSEK, Principal Investigator (PI), Coordinator: Prof. Jana Tumova, SRA ICT TNG Program, 2017-2020.

EU STREP FP7 Project COMPANION, " COoperative dynamic forMation of Platoons for sAfe and eNergy-optImized gOODs transportation", FP7 Programme of the European Commission, co-Principal Investigator (co-PI), 2013-2016.

KTH ACCESS High Risk High Payoff Project, Shaping up networked systems through controlling their statistical moments, with Xiaoming Hu, 2013-2015.

EU STREP FP7 Project RECONFIG, "Cognitive, Decentralized Coordination of Heterogeneous Multi-Robot Systems via Reconfigurable Task Planning", FP7 Programme of the European Commission, Coordinator and Principal Investigator (PI), 2013-2016.

Swedish Research Council (VR), via grant 2009-3948, "Decentralized control of multi-agent systems with limited communication capabilities", Principal Investigator (PI), 2010-2014.

Swedish Research Council (VR), NSF-VR Nordic Research Opportunity Program, Principal Investigator (PI), 2012.

KTH funding for the project Situated Audio Visual Interaction with Robots (SAVIR), KTH Strategic Research Area, The Next Generation: Human Robot Interaction, Robotic Focus Project, co-PI, 2010-1011.

Member of the NASA sponsored project "IDEAS: Influence of Degraded Environment on Airspace Safety". NASA, 2008-2011.

Member of the project "TAIS AURES: Cooperative guard and search:flexible autonomous UGV systems". Swedish Governmental Agency for Innovation Systems, 2007-2009.

Project Leader of the ACCESS Linnaeus Center Project on Wireless Sensing and Actuation. Research on coding, control and estimation for wireless sensor and actuator networks, 2008.

Member of the EU STREP Project ISWARM, "Intelligent Small World Autonomous Robots for Micro-Manipulation", (IST-2004-507006). European Commission, FP6-2002-IST-1, (IST Future and Emerging Technologies, Integrated Project - IP) 2004-7.

Work Package Leader of the EU STREP Project HYBRIDGE, "Distributed Control and Stochastic Analysis of Hybrid Systems Supporting Safety Critical Real-Time Systems Design", IST-2001-32460, 2002-2005.

SUPERVISION

Current Postdocs

Mani Hemanth Dhullipalla, PhD from University of Alberta, from March 2024.

Yushan Li, PhD from Shanghai Jiao Tong University (SJTU), from July 2024.

Pelin Sekercioglu, PhD from Paris-Saclay University, from 2025.

Nicola De Carli, PhD from Universite de Rennes, from 2025.

Ming Li, PhD from TU Eindhoven, from 2025.

Panagiotis Rousseas, PhD from NTUA, from 2025.

Linda Van Der Spaa, PhD from TU Delft, from 2025.

Former Postdocs

[Jana Tumova](#), PhD from Masaryk University, 2013-2016. Now Associate Professor at KTH EECS.

[Pierre-Jean Meyer](#), PhD from University of Grenoble, 2015-2017. Now Reseach Fellow at Université Gustave Eiffel, Lille.

[Leonardo Colombo](#), PhD from Instituto de Ciencias Matematicas (CSIC-UAM-UCM-UC3M), 2017-2018. Now Researcher at ICMAT Madrid.

[Meng Guo](#), PhD from KTH, 2017-2018. Now Assistant Professor at Peking University, China.

[Dimitris Boskos](#), PhD from National Technical University of Athens, 2014-2018. Now Assistant Professor at TU Delft.

Kazumune Hashimoto, PhD from Keio University, Japan, 2018. Now Associate Professor at Osaka University.

[Soulaïmane Berkane](#), PhD from University of Western Ontario, 2018-2019. Now Associate Professor at the University of Quebec in Outaouais.

[Pedro Miraldo](#), PhD from University of Coimbra, 2018-2019. Now Assistant Professor at IST Lisbon.

Andrea Bisoffi, PhD from University of Trento, 2017-2019. Now Assistant Professor at Politecnico di Milano.

Dionysis Theodosis, PhD from NTUA, 2017-2019. Now Postdoc at TU Crete.

Christoforos Keroglou, PhD from University of Cyprus, 2019. Now Researcher at the Democritus University of Thrace, Greece.

Christos Constantinou, PhD from Cyprus University of Technology, 2019-2020.

[Wei Ren](#), PhD from University of Science and Technology of China, 2018-2020. Now Assistant Professor at Dalian University of Technology, China.

Shahab Heshmati-alamdari, PhD from NTUA, 2019-2020. Now Associate Professor at Aalborg University.

Luis Guerrero Bonilla, PhD from GRASP UPenn, 2019-2020. Now Assistant Professor at Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico.

[Pushpak Jagtap](#), PhD from TU Munich, 2020-2021. Now Assistant Professor at Robert Bosch Center for Cyber-Physical Systems, IISc Bangalore.

Ami Sakakibara, PhD from Osaka University, 2020-2021.

[Wenceslao Shaw-Cortez](#), PhD from University of Melbourne, 2019-2021. Now Senior Researcher at the Pacific Northwest National Labs, USA.

Maryam Sharifi, PhD from University of Tehran, 2020-2022. Now Senior Researcher at ABB Sweden.

Pian Yu, PhD from KTH, 2021-2022. Now Assistant Professor at University College London (UCL), UK.

Carlos Rodríguez de Cos, PhD from University of Sevilla, 2021-2022. Now at MathWorks, Sweden.

Chengshuai Wu, PhD from Zhejiang University, 2022. Now Assistant Professor at Xi'an Jiaotong University, China.

Esteban Restrepo, PhD from Paris-Saclay University, 2022-2023. Now Researcher at CNRS, France.

Pouria Tajvar, PhD from KTH, 2022-2024. Now Researcher at Pixelgen Technologies, Sweden.

Shankar Deka, PhD from UIUC, 2022-2023. Now Assistant Professor at Aalto University, Finland.

Xu Fang, PhD from NTU, 2023-2024. Now Assistant Professor at Dalian University of Technology, China.

Tian Tao, PhD from TU Delft, 2023-2025.

Siyuan Liu, PhD from TU Munich, 2023-2025. Now Assistant Professor at TU Eindhoven, Netherlands.

Pedro Roque, PhD from KTH, 2024-2025. Now Postdoc at Caltech.

Eleftherios Vlahakis, PhD from City University of London, 2023-2026. Now Assistant Professor at University West, Sweden.

Current PhD Students

Aditya Krishna Rao, KTH EECS, from 2025.

Tommaso Zaccherini, KTH EECS, from 2024.

Gregorio Marchesini, KTH EECS, from 2023.

Victor Nan Fernandez-Ayala, KTH EECS, from 2022.

Nana Wang, KTH EECS, from 2022.

Farhad Mehdifar, KTH EECS, from 2021.

Former PhD students

Adrian Wiltz, [Set-Invariance Methods for Time-Varying Constraints, Spatio-Temporal Logic and Coordination](#), KTH EECS, co-supervisor Prof. Jonas Martensson, 2020-2026.

Mayank Sewlia, [Path Planning and Control for Multi-Manipulator Systems under Spatio-Temporal Constraints](#), KTH EECS, co-supervisor Prof. Christos Verginis, 2020-2025. Now Researcher at NEURA Robotics, Germany.

Pedro Roque, [Predictive and Vision-based Control for Multi-Agent Aerial and Space Systems](#), KTH EECS, co-supervisors Prof. Mikael Johansson and Prof. Jana Tumova, 2019-2024. Now Postdoc at Caltech.

Maria Charitidou, [Control Synthesis for Multi-Agent Systems under Coupled Signal Temporal Logic Tasks: A Top-Down Model Predictive Approach](#), KTH EECS, co-supervisor Prof. Bo Wahlberg, 2019-2024. Now Postdoc at University of Maryland, USA.

Xiao Tan, [Correctness and Safety in Planning and Control via State-Space Partitions and Barrier Functions](#), KTH EECS, co-supervisor Prof. Jana Tumova, 2018-2023. Now Assistant Professor at Beihang University, China.

Fei Chen, [Transient Control for Leader-follower Multi-agent Systems with Application to Spatiotemporal Logic Tasks](#), KTH EECS, co-supervisor Prof. Jana Tumova, 2018-2023. Now Postdoc at MIT, USA.

Peter Varnai, [Path integral control endowed robot planning under spatiotemporal logic specifications](#), KTH EECS, co-supervisor Prof. Jana Tumova, 2017-2022.

Pian Yu, [Task-oriented control and coordination of multi-agent systems under varying constraints](#), KTH EECS, co-supervisor Prof. Carlo Fischione, 2016-2021. Now Assistant Professor at University College London (UCL), UK.

Lars Lindemann, [Planning and Control of Multi-Agent Systems under Signal Temporal Logic Specifications](#), KTH EECS, co-supervisor Prof. Jana Tumova, 2016-2020. Now Assistant Professor at ETH Zurich, Switzerland.

Christos Verginis, [Planning and Control of Uncertain Cooperative Mobile Manipulator-Endowed Systems under Temporal Logic Tasks](#), KTH EECS, co-supervisor Prof. Danica Kragic, 2015-2020. Now Assistant Professor at Uppsala University, Sweden.

Alexandros Nikou, [Robust and Decentralized Control of Multi-agent Systems under High-level Tasks](#), KTH EECS, co-supervisor Prof. Jana Tumova, 2015-2019. Now at Ericsson Research, Stockholm, Sweden.

Philipp Schillinger, [Specification Decomposition and Formal Behavior Generation in Multi-Robot Systems](#), KTH EECS, Bosch Industrial PhD student, co-supervisor Dr. Mathias Buerger (Bosch), 2015-2019. Now at Bosch Stuttgart.

Pedro Pereira, [Geometric Control of Thrust Propelled Systems](#), KTH EECS, co-supervisor Prof. Jana Tumova, 2014-2019. Now at Mynaric Lasercom, Munich, Germany.

Sebastian van de Hoef, [Coordination of Heavy-Duty Vehicle Platooning](#), KTH EECS, co-supervisor Prof. Karl Henrik Johansson, 2013-2018. Now at HERE Technologies, Langen, Germany.

Meng Guo, [Hybrid Control of Multi-robot Systems under Complex Temporal Tasks](#), KTH EES, co-supervisor Prof. Karl Henrik Johansson, 2011-2016. Now Assistant Professor at Peking University, China.

Antonio Adaldo, [Event-triggered and cloud-support control of multi-robot systems](#), KTH EECS, main supervisor Prof. Karl H. Johansson, 2014-2018. Now at Mathworks, Cambridge, UK.

Sofie Ahlberg, fd. Andersson, KTH EECS, 2016-2022.


Kazumune Hashimoto, Keio University, Japan, main supervisor Prof Suichi Adachi, graduated 2018. Now Associate Professor at Osaka University.

Giannis Roussos, NTUA, main supervisor Prof. Kostas J. Kyriakopoulos, 2008-2010.

Alina Eqtami, NTUA, main supervisor Prof. Kostas J. Kyriakopoulos, from 2008, graduated August 2013.

Yuencheng Yang, KTH Opt&Sys, main supervisor Prof. Xiaoming Hu, 2011-2016.

Alejandro Marzinotto, KTH CSC CVAP, main supervisor Prof. Danica Kragic, 2013-2017.

Michele Colledanchise, KTH CSC CVAP, main supervisor Prof. Petter gren, 2013-2017.

[Martin Andreasson](#), KTH EES, main supervisors Prof. Henrik Sandberg and Prof. Karl H. Johansson. [In Memoriam](#)

MSc Thesis

Kevin Jamsahar, “Design of a Modular Platooning and Traffic Simulator”, KTH EECS, 2025.

Giovanni Girardin, "Adaptive Performance Control for Bipolar-Coordinate Based Multi-Robot Formations under Input Saturation", KTH EECS, 2025, with University of Padova.

Georgios Mitsos, “Secure-by-Construction Planning and Control of Multi-Agent Systems”, KTH EECS, 2025.

Enrico Dozzi, “A Differential Game Framework for Multi-Agent Coordination under Signal Temporal Logic Specifications”, KTH, EECS, 2025.

Rhnetou Virginio, “On Model Predictive Control for Single-Strut Hydrofoil Vessel”, KTH, EECS, 2025.

Andrea Boldrini, “Optimal Control for Enhanced Flight Performance of a Tilt-Rotor Drone”, KTH, SCI, 2025.

Benjamin Bradin, “A Framework for Collaborative Task Assignment and Control in Multi-Robot Systems under Communication Constraints”, KTH EECS, 2024.

Raphael Stöckner, “Failsafe Control for Space Robotic Systems”, KTH EECS, 2024.

Florian Schwald, “Distributed Leader-Follower Model Predictive Control for Multi Platoon Coordination under Signal Temporal Logic specifications”, KTH EECS, 2024.

Lukas Vogel, “Distribution-Free Estimation and Control of Linear Stochastic Systems Using Conformal Prediction”, KTH EECS, 2024, with ETHZ.

Davide Peron, “Multi-Robot Coordination for Precision Agriculture Under Recurring Linear Temporal Logic”, KTH EECS, 2024, with Univ. of Padova.

Jorge Silva, "Object Manipulation with Robust Visual Servoing under Human Supervision", KTH EECS, 2024, with IST Lisbon.

Rufus Wong, "Path Planning for Nonholonomic Mobile Manipulators with End Effector Path Constraint", KTH EECS, 2024.

Hampus Carlens, "Manipulation on the move for pick and place tasks", KTH EECS 2024, with Ericsson Research.

Tianrun Sun, "Control Barrier Functions for Formation Control of Leader-follower Multi-agent Systems", KTH EECS, 2023.

Omid Mirzaeododangeh, "Coordinate-Free Spacecraft Formation Control with Global Shape Convergence under Vision-Based Sensing", KTH EECS, 2023.

Ryo Namerikawa, "On the Equivalence of Time-Varying CBF-Based Control and Prescribed Performance Control: Conversion and Qualitative Comparison", KTH EECS, 2023, with Keio University.

Yixiao Zhang, "Multi-robot coordination and planning with human-in-the-loop under STL specifications", KTH EECS, 2023.

Sujet Phodapol, "Predictive Controllers for Load Transportation in Microgravity Environments", KTH EECS, 2023.

Zelin Yu, "Advancements in Dependability Analysis of Safety-Critical Systems: Addressing Specification Formulation and Verification Challenges", KTH EECS, 2023.

Sara Gomiero, "Sampling-based synthesis of controllers for coupled agents under Signal Temporal Logic specifications", KTH EECS 2022, with University of Padova.

Gregorio Marchesini, "Application of Discrete-Time High-Order Control Barrier Functions for a Multi-Spacecraft Inspection", KTH EECS, 2022.

Victor Nan Fernandez-Ayala, "Control Barrier Function-enabled Human-in-the-loop Control For Multi-robot Systems: Centralized And Distributed Approaches", KTH EECS, 2022.

Xiong Xiong, "An Input-sample Method For Zonotopic Obstacle Avoidance With Discrete-time Control Barrier Functions", KTH EECS, 2022.

Arno Frauenfelder, "Safe autonomous lane-switching controller using high-order control barrier and Lyapunov functions", KTH EECS, 2022.

Hashem Ghasemi, "Toward Adaptation of Data-Enabled Predictive Control for Nonlinear Systems", KTH EECS, 2022.

Haoxiang Shi, “Robot Control Using Path Integral Policy Improvement and Deep Dynamics Models”, KTH EECS, 2022.

Roberto Castro Sundin, “Model Predictive Control for Cooperative Multi-UAV Systems”, KTH EECS, 2021.

Maxime Boutot, "Towards Real-Time Deep Learning Tubes: Trajectory Tracking with a Quadrotor", KTH EECS, 2021, with EPFL.

Marc Seidel, “Periodic Event-triggered Consensus for Multi-agent Systems Based on Non-monotonic Lyapunov Functions”, KTH EECS, 2020, with Univ. of Stuttgart.

Kartik Seshadri Chari, “Dynamic Modelling and Optimal Control of Autonomous Heavy-duty Vehicles”, KTH EECS, 2020, with Scania.

Akash Singh, “Platoon Coordination under Signal Temporal Logic Specifications”, KTH EECS, 2020.

Elisa Bin, “MPC-based Visual Servo Control for UAVs”, KTH EECS, 2020.

Cecilia Martínez Martín, “Development of an automated space rated solar panel array for future lunar rover mission”, KTH EECS, 2020.

Adrian Wiltz, “Distributed Robust Model Predictive Control of Multi-agent Systems”, KTH EECS, 2020, with Univ. of Stuttgart.

Jonathan Blixt, “Learning-Based Auto-Tuning for Motion Controllers of Mobile Robots”, KTH EECS, 2019, with Ocado.

Nicola Lissandrini, “Non-linear Model Predictive Control for Ground-Aerial Cooperative Robots”, KTH EECS, 2019, with Univ. of Padova.

Jakub Nowak, “Robust Control of Coupled Multi-robot Systems under Signal Temporal Logic Specifications with Collision Avoidance”, KTH EECS, 2018.

Tengfan Lin, “A Graphical User Interface for the Hybrid Control of Multi-Robot Systems under Linear Temporal Logic”, KTH EECS, 2018.

Lukas Schönbacher, “A Graphical User Interface for the Hybrid Control of Multi-Robot Systems under Linear Temporal Logic”, KTH EECS, 2018, with ETHZ.

Ruth Aleksandrauskaite, “Analysis of Velocity Estimation Methods for High-Performance Motion Control Systems”, KTH EECS, 2018, with Mycronic AB.

Nadine Drollinger, “Developing a System for Robust Planning using Linear Temporal Logic”, KTH EECS, 2018.

Yu Wang, “Cooperative Transportation of Mobile Manipulators with Collision Avoidance”, KTH EECS, 2018.

Pedro Roque, “Heterogeneous Collaborative Aerial Manipulation”, KTH EECS, 2017.

Daniel Müller, “Trajectory generation under metric interval temporal logic specification”, KTH EES, 2017, with Univ. Stuttgart.

Imran Khan, “Decentralized Navigation of Multiple Quadrotors using Model Predictive Control”, KTH EES, 2017.

Thomas Garrett, “A Discrete Büchi Automata Distance for Formal Methods Based Control”, KTH EES, 2017.

Alexandros Filotheou, “Robust Decentralized Control of Cooperative Multi-robot Systems”, KTH EES, 2017.

Giorgio Corra, “Motion planning for coverage with vision-inspired sensors”, KTH EES, 2016.

Paul Rouse, “Multi agent control with LTL specifications and abstraction with input memories”, KTH EES, 2016.

Ziwei Xu, “LTL motion planning with collision avoidance for a team of quadrotors”, KTH EES, 2016.

Sofie Andersson, “Automatic Control Design Synthesis under Metric Interval Temporal Logic Specifications”, KTH EES, 2016.

Lars Lindemann, “Robust Model Predictive Control of Linear Systems under Signal Temporal Logic Specifications”, KTH EES, 2016.

Manuel Herzog, “Design and Implementation and Analysis of a Controller for a Load Suspended from an Aerial Vehicle”, KTH EES, 2016, with University of Stuttgart.

Riccardo Zanella, Design, “Implementation and Test of Decoupled Controllers for Mobile Manipulation with Aerial Robots”, KTH EES, 2016, with University of Padova.

Viking Flyhammar, “A Method Based on Bayesian Networks for Estimation of Test Confidence”, KTH EES, 2015, supervised by Dr. Jana Tumova and Dr. Mattias Nyberg (Scania).

Anders Gidmark, “Using CSPs (Constraint Satisfaction Problems) to analyze functional safety of vehicles with high variability”, KTH EES, 2015, supervised by Dr. Jana Tumova and Dr. Mattias Nyberg (Scania).

Pete Watcharawit, “Applying Agent-Based Modeling to Studying Emergent Behaviors of the Immune System Cells”, KTH EES, 2015, supervised with Dr. Petter Brodin (Karolinska Institutet).

Ioannis Hatzis, “Motion Planning of Multi-Agent Systems under Temporal Logic Specifications”, KTH EES, 2015.

Luca Macellari, “Average Consensus with Prescribed Performance Guarantees for Multi-agent Double-Integrator Systems”, KTH EES, 2015.

Steffen Linsenmayer “Event-triggered control of multi-agent systems with double-integrator dynamics: Application to vehicle platooning and flocking algorithms”, KTH EES, 2014. With University of Stuttgart.

Ernest Company, “Formal Methods Based Hybrid Control Synthesis for Multi-Agent Systems”, KTH EES, 2014. With University of Valencia.

Liangrui Huang, “Relaxations in Communication Constrains and Task Specifications in a Multi-agent System under Independent and Dependent specifications”, KTH EES, 2014.

Naomi Anveden Hertzberg, “Coordinated Control of Multiple Autonomous Underwater Vehicles”, KTH EES, 2014.

Philipp Köhler, “Double-integrator leader-follower networks: Sufficient conditions for connectivity maintenance”, KTH EES, 2014. With University of Stuttgart.

Geoffray Battiston, “Collaborative Action Planning for Humanoid Robots Exchanging a Small Object”, KTH EES, 2014.

Olivier Balland , “Collaborative motion planning of humanoid robots”, KTH EES, 2014.

Anton Hou, “Analysis and Design of Dynamic Behavior for Embedded Systems Using Policy-Based Design”, KTH EES, 2014. With Detlef Scholle (Alten).

Diogo Almeida, “Event-Triggered Attitude Stabilization of a Quadcopter”, KTH EES, 2014.

Lorris Robin Dola , “Biomimetic trajectory tracking by means of event-based control”, KTH EES, 2014.

Maryam Oryani, “Applying Agent-Based Modeling to Studying Emergent Behaviors of the Immune System Cells”, KTH EES, 2014, supervised with Dr. Petter Brodin (Karolinska Institutet).

Johanna Orihuela Swartling, “Circumnavigation control of multiple quadrotors”, KTH EES, 2014.

Kazumune Hashimoto, “Distributed Aperiodic Model Predictive Control for perturbed multi-agent systems”, KTH EES, 2013.

Adrien Rigaud, “Formal control synthesis for complex collaborative LTL tasks”, School of Electrical Engineering, KTH EES, 2013.

Etienne Dargaud, “Pick-up and delivery planning in multi-agent systems under temporal logic specifications”, KTH EES, 2013.

Martina Zambelli, “Nonholonomic Stabilization with Prescribed Performance Guarantees”, KTH EES, 2013.

Sebastian van de Hoef, “Extended Consensus Algorithms”, KTH EES, 2013.

Haukur Ingi Heidarsson, “Simulation and Implementation of Temporal Logic-based Motion Planning for Autonomous Vehicles”, KTH EES, 2013.

Philipp Heer, “Decentralized MPC for smart grid applications”, KTH EES, 2013.

Matteo Vanin, “Modeling, identification and navigation of autonomous air vehicles”, KTH EES, 2013.

Dinsefa Muhammed Mustefa, “Dual Arm Robot Control Based on Navigation Function with Prescribed Performance Guarantees”, KTH CSC and KTH EES, 2013.

Michele Colledanchise, “Stabilization and Collision Avoidance of Non-point Agents in Dynamic Environments: A Potential Field Approach”, KTH EES, 2012.

Axel Klingenstein, “Cooperation of Aerial and Ground Vehicles”, KTH EES, 2012.

Alejandro Marzinotto, “Decentralized Collaborative Control of Aerial and Ground Vehicles”, KTH EES, 2012.

Nicolas Vinikoff, “Some Fundamental Limitations of Networked Control Systems”, KTH EES, 2012.

Sergej Golfinger, “Event-triggered control for synchronization”, KTH EES, 2012. With University of Stuttgart.

Mazin Yousif, “Aperiodic Wireless Control of a Water Tank System”, KTH EES, 2011. With University of Grenoble.

Meng Guo: “Quantized Cooperative Control”, KTH EES, 2011.

Kim Vizins: “Modelling and Control of Dual Arm Robotic Manipulators”, KTH EES, 2011. (co-supervised with Prof. Bo Wahlberg).

Georg Seyboth: “Event-based Control for Multi-Agent Systems”, KTH EES, 2010. With University of Stuttgart.

Joel Rundgren: “Modelling and Control of an SMT Robot”, KTH EES, 2010.

Pedro Teixeira, “Event-Based Coordination of Multi-Agent Systems”, KTH EES, 2008. With Universidade do Porto.

Fotios Katsilieris, “Search and Secure Using Mobile Robots”, KTH EES, 2008.

EDITORIAL/CONFERENCE COMMITTEE SERVICE

Senior Editor, IEEE Transactions on Control of Network Systems, 2023-.

Associate Editor, IEEE Transactions on Control of Network Systems, 2019-2022.

Associate Editor, Automatica, 2013-.

Associate Editor, Unmanned Systems, 2018-2021.

Associate Editor, IET Control Theory and Applications, 2013-2018.

Associate Editor, IEEE Transactions on Automation Science and Engineering, 2015-2018.

Member of Conference Editorial Board of the IEEE Control Systems Society (CSS), 2016-2024.

Publications Chair, 2024 European Control Conference (ECC24), Stockholm, Sweden.

Associate Editor at Large, European Control Conference (ECC), 2025-.

Technical Program Committee, IEEE Conference Decision and Control (IEEE CDC), 2023-.

Program co-Chair, 2024 IEEE International Conference on Automation Science and Engineering (CASE), Bari, Italy, August 2024.

Member of the International Program Committee for the 7th IFAC Conference on Analysis and Design of Hybrid Systems (ADHS), Brussels, Belgium, July 2020.

Member of the International Program Committee for the 15th International Workshop on Discrete Event Systems (WODES), Rio De Janeiro, Brazil, May 2020.

Member of the International Program Committee for the IEEE International Conference on Robotics and Automation (ICRA), 2020-2023.

Member of the International Program Committee for the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2020-2023.

Tutorials and Workshops Co-Chair, 18th European Control Conference (ECC20), St. Petersburg, Russia, May 2020.

Regional Chair, 17th International Conference on Control and Automation (ICCA), Naples, Italy, June 2022.

Regional Chair, 15th International Conference on Control and Automation (ICCA), Edinburgh, UK, July 2019.

Member of the International Program Committee for the 17th European Control Conference (ECC19), Naples, Italy, June 2019.

Member of the International Program Committee for the 2019 IEEE International Conference on Robotics and Automation (ICRA), Montreal, Canada, May 2019.

Member of the International Program Committee for the 14th International Symposium on Distributed Autonomous Robotic Systems (DARS), Univ. Colorado at Boulder, USA, October 2018.

Member of the Technical Program Committee for the 57th IEEE Conference on Decision and Control (CDC), Miami Beach, FL, USA, December 2018.

Member of the International Program Committee for the 16th European Control Conference (ECC18), Limassol, Cyprus, June 2018.

Member of the International Program Committee for the 14th International Workshop on Discrete Event Systems (WODES), Sorrento Coast, Italy, May 2018.

Member of the International Program Committee for the 6th IFAC Conference on Analysis and Design of Hybrid Systems (ADHS), Oxford, UK, July 2018.

Senior Editor of the IEEE Conference on Automation Science and Engineering (CASE) Conference Editorial Board, 2017-2019.

Member of the International Program Committee for the 13th International Symposium on Distributed Autonomous Robotic Systems (DARS), London, UK, November 2016.

Member of the International Program Committee for the 15th European Control Conference (ECC16), Aalborg, Denmark, June 2016.

Member of the International Program Committee for the 13th International Workshop on Discrete Event Systems (WODES), Xi'an, China, May 2016.

Member of the International Program Committee for the IEEE Conference on Control Applications (CCA), Sydney, Australia, October 2015.

Publicity Co-Chair of the ACM/IEEE 6th International Conference on Cyber-Physical Systems, ICCPS 2015, Seattle, USA, April 2015.

Member of the International Program Committee for the 14th European Control Conference (ECC15), Linz, Austria, July 2015.

Member of the Program Committee for the 2015 Robotics: Science and Systems Conference (RSS), Rome, Italy, July 2015.

Member of the International Program Committee for the IEEE Conference on Control Applications (CCA), Antibes, France, October 2014.

Member of the Program Committee for the 2014 Robotics: Science and Systems Conference (RSS), UC Berkeley, CA, USA, July 2014.

Member of the International Program Committee for the 13th European Control Conference (ECC14), Strasbourg, France, June 2014.

Member of the International Program Committee for the 13th Conference on Mobile Robots and Competitions, ROBOTICA 2013, Portugal, April 2013.

Member of the International Program Committee for the 12th European Control Conference (ECC13), Zurich, Switzerland, July 2013.

Member of the International Program Committee for the 12th International Conference on Control, Automation, Robotics and Vision, ICARCV 2012, China, December 2012.

Member of the International Program Committee for the 9th International Conference on Informatics in Control, Automation and Robotics (ICINCO), Rome, Italy, July 2012.

Member of the International Program Committee for the 10th IFAC Symposium on Robot Control (SYROCO 2012), Dubrovnik, Croatia, on September 05-07, 2012.

Associate Editor for the IEEE International Conference on Robotics and Automation (ICRA), St. Paul, Minnesota, USA, May 2012.

Member of the Conference Editorial Board of the IEEE Robotics and Automation Society (RAS), 2011-12.

Member of the International Program Committee for the 3rd International Workshop on Wireless Sensor, Actuator and Robot Networks (WiSARN), Shanghai, China, April 2011, in conjunction with IEEE INFOCOM 2011.

Member of the International Program Committee for the 11th Conference on Mobile Robots and Competitions, ROBOTICA 2011 Lisbon, Portugal, April 2011.

Member of the International Program Committee for the 6th annual IEEE Conference on Automation Science and Engineering (IEEE CASE), sponsored by the IEEE Robotics and Automation Society (RAS), August 2010 in Toronto, Ontario, Canada.

Member of the International Program Committee for the 1st International Workshop on Wireless Sensor, Actuator and Robot Networks (WiSARN), Montreal, Montreal, Canada, June 2010, in conjunction with IEEE WoWMoM 2010.

Member of the International Program Committee for the 10th Conference on Mobile Robots and Competitions, ROBOTICA 2010 Leiria, Portugal, March 2010.

Program Committee Chair for ACCESS 1st Industrial Workshop, Stockholm, Sweden, March 2008.

UNIVERSITY/SCHOOL/DEPARTMENTAL SERVICE

Division Head, Division of Decision and Control Systems, KTH EECS, 2024-2026.

Division Vice-Head, Division of Decision and Control Systems, KTH EECS, 2023.

Affiliated Faculty, WASP Autonomous Systems Program, from 2021.

Affiliated Faculty, Digital Futures, from 2021.

Member of KTH Selection Committee for KAW Fellow Nomination, 2019-2023.

Member of Program Council for Systems, Control and Robotics MSc Program, KTH, 2019-pres.

KTH ACCESS Linnaeus Centre, Vice Deputy Chair of CPS Thematic Area, 2015-2018.

Smart Mobility Lab co-director, Smart Mobility Lab, School of EECS, KTH, 2013-.

Affiliated Faculty, KTH SRA ICT TNG, from 2015.

Affiliated Faculty, KTH ACCESS Linnaeus Centre, from 2010.

Affiliated Faculty, KTH Centre for Autonomous Systems, from 2011.

ASSIGNMENTS AS PUBLIC EXAMINER/OPPONENT (partial)

Member of the PhD committee of Pedro Miguel Dias Pateiro Trindade, IST Lisbon, Portugal, 2026.

Member of the PhD committee of Michael Hertneck, University of Stuttgart, Germany, 2025.

Member of the PhD committee of Armin Pirastehzad, University of Groningen, Netherlands, 2025.

Member of the PhD committee of Panagiotis Rousseas, NTUA, Greece, 2025.

Member of the PhD committee of Jeppe Heini Mikkelsen, DTU, Denmark, 2025.

Member of the PhD committee of Jin Chen, University of Groningen, Netherlands, 2025.

Member of the PhD committee of Koen Scheres, TU Eindhoven, Netherlands, 2024.

Member of the PhD committee of Han Wang, University of Oxford, UK, 2024.

Member of the PhD committee of Xiaoyu Liu, TU Delft, Delft, Netherlands, 2024.

Member of the PhD jury for Nicola de Carli, University of Rennes, France, 2024.

Member of the PhD committee of Birgit van Huijgevoort, TU Eindhoven, Netherlands, 2023.

Member of the PhD committee of Miao Guo, University of Groningen, Netherlands, 2023.

PhD Opponent for Constantin Cronrath, Chalmers, Sweden, 2023.

Member of the PhD committee of Zahra Ramezani, Chalmers, Sweden, 2022.

Member of the PhD committee of Tian Tao, TU Delft, Delft, Netherlands, 2024.

Member of the PhD committee of Siyuan Liu, University of Munich, Germany, 2022.

Member of the PhD committee of Manuel Boldrer, University of Trento, Italy, 2022.

Member of the PhD jury for Esteban Restrepo, ONERA, France, 2021.

Member of the PhD committee of Nelson Chan, University of Groningen, Netherlands, 2021.

Member of the PhD committee of Steffen Linsenmayer, University of Stuttgart, Germany, 2021.

Member of the PhD committee of Anna Mannucci, Univ. Pisa, Italy, 2020.

Member of the PhD committee of Shahab Heshmati, NTUA, Greece, 2019.

Member of the PhD committee of Silun Zhang, KTH, Sweden, 2019.

Lic Opponent of Fredrik Hagebring, Chalmers, Sweden, January 2019.

Member of the PhD committee of Danial Senejohnny, University of Groningen, Netherlands, November 2018.

Member of the PhD committee of Vladislav Nenchev, TU Berlin, Germany, November 2018.

Member of the PhD committee of Ernesto Aranda Escolástico, UNED, Madrid, Spain, September 2018.

Member of the PhD committee of Anqi Fu, TU Delft, Delft, Netherlands, February 2018.

Member of the PhD jury for Christophe Viel, ONERA, France, September 2017.

Member of the PhD committee of Kristian Klausen, NTNU, Trondheim, Norway, June 2017.

Member of the PhD committee of Jingbo Wu, University of Stuttgart, Germany, April 2017.

Member of the PhD jury for Laura Dal Col, LAAS CNRS, Toulouse, France, October 2016.

External reviewer for the PhD Examination of Eoin Devane, University of Cambridge, UK, February 2016.

Member of the PhD committee of Johannes Nygren, Uppsala University, Sweden, February 2016.

Member of the PhD committee of Georg Seyboth, University of Stuttgart, Germany, January 2016.

Lic Opponent of Emil Fresk, LTU, Sweden, November 2015.

PhD Opponent of Thaker Nayl, LTU, Sweden, June 2015.

Member of the PhD committee of Giannis Roussos, NTUA, Greece, March 2015.

Member of the PhD committee of Ali Saidi, KTH, Sweden, November 2013.

Member of the PhD jury for Maria Guinaldo Losada, UNED, Spain, July 2013.

Member of the PhD committee of Alina Eqtami, NTUA, Greece, July 2013.

Member of the PhD jury for Gabriel Rodrigues De Campos, University of Grenoble, France, November 2012.

Member of the PhD committee for Dimitra Panagou, NTUA, Greece, August 2012.

Member of the PhD jury for Rosario Aragues Munoz, University of Zaragoza, Spain, March 2012.

ASSIGNMENTS AS OUTSIDE EXPERT (partial)

Panel member for the European Research Council project evaluation, 2024-.

Evaluation panelist for Norwegian Research Council, 2024.

Evaluation panelist for Swedish Research Council (VR), 2024.

Member of the External Scientific Advisory Board, Center for Automation and Robotics (CAR), Madrid, Spain, 2022-2025.

Eurobotics George Giralt PhD Thesis Award evaluation committee member, 2017-.

Evaluation panelist for WASP PhD program, 2021-.

Reviewer for project applications for the European Research Council (ERC), 2016-.

Reviewer for national research evaluation of Dutch Research Council, 2020.

Reviewer for national research evaluation of Italian Research Council, summer 2016.

Reviewer for national research projects for Swiss Research Council, summer 2016.

Reviewer for national research projects for Austrian Research Council, 2017.

Reviewer for national research projects for Israeli Research Council, 2017.

Reviewer for project proposals to the Romanian Research Council, summer 2011.

Reviewer for proposals to the Programme Inter Carnot Fraunhofer, 2011.

Reviewer/evaluation committee for faculty promotion and tenure applications (USA, Canada, UK, EU, Asia, Oceania), 2017-.

TEACHING EXPERIENCE

Lecturer and Course co-Responsible: EECI PhD Course on Formal Methods for Multi-Agent Feedback Control Systems, TU Delft, Netherlands, 2023, 2025. With Lars Lindemann.

Lecturer and Course Responsible: FEL3230 Hybrid Systems, School of Electrical Engineering, KTH ACCESS specialized graduate course, from Spring 2015.

Lecturer and Course Responsible: FEL3330 Networked and Multi-Agent Control Systems, School of Electrical Engineering, KTH ACCESS specialized graduate course, from Spring 2011.

Lecturer and Course Responsible: EL2450 Hybrid and Embedded Control Systems, School of Electrical Engineering, KTH, undergraduate course, Spring 2011-.

Guest Lecturer: Construction of Autonomous Unmanned Aerial Vehicles, KTH Dept of Machine Design, graduate course, Spring 2011.

Reading Group on Formal Methods for Control, School of Electrical Engineering, KTH, 2013-2017.

Reading Group on Secure and Reconfigurable Multiagent and Networked Control Systems, School of Electrical Engineering, KTH, Spring 2011.

AWARDS

2025 Plenary Speaker, 64th IEEE Conference on Decision and Control, Rio de Janeiro, Brazil, December 2025.

2023 Elevated to *IEEE Fellow*, from January 2023.

2022 IEEE ICRA 2022 Outstanding Coordination Paper Award for the paper [Decentralized Model Predictive Control for Equilibrium-based Collaborative UAV Bar Transportation](#) by Roberto Castro Sundin, Pedro Roque and Dimos V. Dimarogonas.

2021 My PhD student Christos Verginis is the recipient of the EECI European PhD Award on Control for Complex and Heterogeneous Systems.

2021 My PhD student Christos Verginis is among the 4 finalists for the euRobotics George Giralt PhD award edition 2021.

2020 My PhD student Pian Yu is among the 5 finalists for Best Student Paper Award at ACC 2020

2019 My PhD student Lars Lindemann receives the Outstanding Student Paper Award at IEEE CDC 2019

2018 My PhD student Lars Lindemann is among the 5 finalists for Best Student Paper Award at the American Control Conference 2018.

2018 My first PhD student Meng Guo is among the three finalists for the EECI European PhD Award on Control for Complex and Heterogeneous Systems.

2017 Meng Guo (my first PhD student) is among the 5 finalists for the euRobotics George Giralt PhD award edition 2017.

2013 IEEE Transactions on Automatic Control Outstanding Reviewer.

2007 and 2008 KTH ACCESS Linnaeus Center Award for best post-doctorial application, selected in the four winning candidates out of more than one hundred applications.

General Chair's Recognition Award for Interactive Papers for the paper *Event-triggered control for multi-agent systems*, by D. V. Dimarogonas and K. H. Johansson, presented at the IEEE CDC, Shanghai, China, 2009.

INVITED TALKS (partial list)

2026, IST Lisbon, Portugal

2025, 64th IEEE CDC, Rio, Brazil, Plenary Speaker

2025, LTU, Luleå, Sweden

2025, University of Stuttgart, Germany

2025, University of Groningen, the Netherlands, JC Willems Seminar Series

2025, KTH-University of Padova joint Workshop, Stockholm, Sweden, Keynote Speaker

2025, DTU, Denmark

2024, Aalborg 2nd Robotics Challenge, AAU, Denmark, Keynote Speaker
2024, KTH EECS Impact Day, Sweden
2024, INRIA Rennes, France
2023, TU Eindhoven, the Netherlands
2023, LiU, Linköping, Sweden
2023, Chalmers University of Technology, Sweden
2023, Workshop for John Baras 75th birthday, Univ. of Maryland, USA, Invited Speaker
2023, CEA Symposium on Control Engineering, Madrid, Spain, Keynote Speaker
2022, Max Planck Institute, Kaiserslautern, Germany
2022, Swedish Control Conference (Reglermöte), LTU, Sweden, Keynote Speaker
2022, University of Southern California, USA
2022, Peking University, China
2022, WASP WARA-PS Workshop, Västervik, Sweden, Keynote Speaker
2021, DISC Summer School on Multi-Robot Systems, Delft, Netherlands
2021, Yale University, USA
2020, Technion, Israel
2020, University of Minnesota, USA
2020, Robotics Research Jam Sessions Workshop, University of Pisa, Italy
2019, ICMAT Madrid, Spain
2019, University of Magdeburg, Germany
2019, Chalmers University, Sweden
2018, University of Groningen, the Netherlands, JC Willems Seminar Series
2018, FORTH, Greece, Greek ERC Grantees Workshop, Invited Speaker
2018, DECOD Workshop, Toulouse, France
2018, TU Berlin, Germany
2018, IEEE/RSJ IROS, Workshop on Multi-Robot Perception-Driven Control and Planning
2018, Dagstuhl Seminar Mach.Learn. & Mod. Checking, Invited Speaker (could not attend)
2017, European Robotics Forum, Edinburgh, Invited Speaker
2017, The Royal Swedish Academy Of Sciences, Stockholm, Invited Talk
2017, Workshop on Hybrid Dynamical Systems, Univ Trento, Italy, Invited Speaker
2017, AEROWORKS Aerial Robotics Workshop, Univ Patras, Greece, Invited Speaker
2016, ANR CO4 Workshop, Toulouse, France, Invited Speaker
2015, Oberwolfach CPS Workshop, Germany, Invited Speaker
2014, IEEE CDC, Invited Paper in session on on Formal Methods for Control
2014, RSS Workshop on Formal Methods for Control
2014, IEEE IROS, Workshop on Connectivity methods for Formation Control
2014, ACC, Invited Paper in session on Formal Methods for Control
2013, IEEE CDC, Invited Paper in session on Event-triggered Control
2013, ECC, Invited Paper in session on Event-triggered Control
2012, IEEE CDC, Invited Paper in session on Event-triggered Control
2012, University of Twente, the Netherlands
2012, Linköping University, Sweden
2011, Universite catholique de Louvain, Louvain-la-Neuve, Belgium
2010, Universitaet Stuttgart, Stuttgart, Germany

2010, IEEE ICRA, Workshop on Search and Pursuit/ Evasion in the Physical World
2009, LIDS, MIT, Boston, USA
2009, Technische Universitat Munchen, Munich, Germany
2008, TU Delft, the Netherlands
2008, Technische Universitat Munchen, Munich, Germany
2007, Département d'Automatique de Grenoble and Inria Rhones Alpes, Grenoble, France
2007, IEEE ICRA, Workshop on Collective Behaviors inspired by Biological and Biochemical Systems
2005, Georgia Institute of Technology, Atlanta, Georgia, USA

PUBLICATIONS- <https://people.kth.se/~dimos/publication.html>

Google Scholar Profile: https://scholar.google.se/citations?user=Z5npQ_gAAAAJ&hl=en

Journal Papers

[J187] Gregorio Marchesini, Siyuan Liu, Lars Lindemann and Dimos V. Dimarogonas, Sampling-Based Planning Under STL Specifications: A Forward Invariance Approach, *IEEE Transactions on Automatic Control*, 2026, to appear.

[J186] Xiaoyu Liu, Dimos V. Dimarogonas, Changxin Liu, Azita Dabiri and Bart De Schutter, Distributed model predictive control without terminal cost under inexact distributed optimization, *Automatica*, 2026, to appear.

[J185] Yushan Li, Jianping He and Dimos V. Dimarogonas, Inverse Inference on Cooperative Control of Networked Dynamical Systems, *Automatica*, 2026, to appear.

[J184] Dongjae Lee, Dimos V. Dimarogonas and H. Jin Kim, Switching control of underactuated multi-channel systems with input constraints for cooperative manipulation, *IEEE Transactions on Control Systems Technology*, 2026, to appear.

[J183] Neelabhro Roy, Mani H. Dhullipalla, Gourav Prateek Sharma, Sara Sandberg, Dimos V. Dimarogonas and James Gross, Quality of Control-based Control-Communication Co-design for Collaborative Robotics, *IEEE Transactions on Industrial Informatics*, 2026, to appear.

[J182] Zhihao Liu, Jorge Silva, Ruirui Zhong, Qiang Qin, Neelabhro Roy, Victor Nan Fernandez-Ayala, Johan Lesko, Ulf Håkansson, Sara Sandberg, Dimos V. Dimarogonas, James Gross, Xi Vincent Wang and Lihui Wang, ConstrucTwin: Digital Twin-driven Multi-robot Construction System Toward Industry 5.0, *IEEE Transactions on Systems, Man and Cybernetics: Systems*, 2026, to appear.

[J181] Irene Perez-Salesa, Dimos V. Dimarogonas, Carlos Sagues and Rodrigo Aldana-López, Cooperative stochastic MPC under hard input constraints and event-triggered communication, *IEEE Transactions on Control of Network Systems*, 2026, to appear.

[J180] Changxin Liu, Xiao Tan, Xuyang Wu, Dimos V. Dimarogonas and Karl H. Johansson, Achieving violation-free distributed optimization under coupling constraints, *Automatica*, 2026, to appear.

[J179] Gregorio Marchesini, Siyuan Liu, Lars Lindemann and Dimos V. Dimarogonas, A Communication Consistent Approach to Signal Temporal Logic Task Decomposition in Multi-Agent Systems, *IEEE Transactions on Automatic Control*, 2025, to appear.

[J178] Pedro Roque, Sujet Phodapol, Elias Krantz, Jaeyoung Lim, Joris Verhagen, Frank J. Jiang, David Dorner, Huina Mao, Gunnar Tibert, Roland Siegwart, Ivan Stenius, Jana Tumova, Christer Fuglesang, and Dimos V. Dimarogonas, Towards Open-Source and Modular Space Systems with ATMOS, *IEEE Transactions on Field Robotics*, 2025, to appear.

[J177] Rufus Cheuk Yin Wong, Mayank Sewlia, Adrian Wiltz and Dimos V. Dimarogonas, Generating and Optimizing Topologically Distinct Guesses for Mobile Manipulator Path Planning with Path Constraints, *IEEE Robotics and Automation Letters*, 2025, to appear.

[J176] Mayank Sewlia, Christos Verginis and Dimos V. Dimarogonas, MAPS2: Multi-Robot Autonomous Motion Planning Under Signal Temporal Logic Specifications, *International Journal of Robotics Research*, 2025, to appear.

[J175] Mani Hemanth Dhullipalla and Dimos V. Dimarogonas, Event-triggered predictor-based control of networked systems with input delays, *IEEE Control Systems Letters (L-CSS)*, 2025, to appear.

[J174] Tian Tao, Charalampos P. Bechlioulis and Dimos V. Dimarogonas, Distributed adaptive prescribed performance control for interconnected Euler-Lagrange systems under input constraints, *IEEE Transactions on Control of Network Systems*, 2025, to appear.

[J173] Victor Nan Fernandez-Ayala, Jorge Silva, Meng Guo and Dimos V. Dimarogonas, [Robust Visual Servoing under Human Supervision for Assembly Tasks](#), *European Journal of Control*, Vol. 86, Part A, pp. 101312, November 2025.

[J172] Nicola De Carli and Dimos V. Dimarogonas, [A Distributed Kalman-like Observer with Dynamic Inversion-Based Correction for Multi-Agent Estimation](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 9, pp. 523-528, 2025.

[J171] Tommaso Zaccherini, Siyuan Liu and Dimos V. Dimarogonas, [Multi-agent estimation and control based on a novel k-hop Distributed Prescribed Performance Observer](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 9, pp. 841-846, 2025.

[J170] Siyuan Liu, Adnane Saoud and Dimos V. Dimarogonas, [Controller Synthesis of Collaborative Signal Temporal Logic Tasks for Multi-Agent Systems via Assume-Guarantee Contracts](#), *IEEE Transactions on Automatic Control*, Vol. 70, No. 9, pp. 5894-5909, September 2025.

[J169] Xiao Tan, Changxin Liu, Karl H. Johansson and Dimos V. Dimarogonas, [A continuous-time violation-free multi-agent optimization algorithm and its applications to safe distributed control](#), *IEEE Transactions on Automatic Control*, Vol. 70, No. 8, pp. 5114-5128, August 2025.

[J168] Farhad Mehdifar, Lars Lindemann, Charalampos P. Bechlioulis and Dimos V. Dimarogonas, [Low-Complexity Control for a Class of Uncertain MIMO Nonlinear Systems under Generalized Time-Varying Output Constraints](#), *IEEE Transactions on Automatic Control*, Vol. 70, No. 7, pp. 4270-4285, July 2025.

[J167] Xu Fang, Lihua Xie and Dimos V. Dimarogonas, Simultaneous Distributed Localization and Formation Tracking Control via Matrix-weighted Position Constraints, *Automatica*, 2024, to appear.

[J166] Siyuan Liu, Xiang Yin, Dimos V. Dimarogonas and Majid Zamani, [On Approximate Opacity of Stochastic Control Systems](#), *IEEE Transactions on Automatic Control*, Vol. 70, No. 6, pp. 3846-3861, June 2025.

[J165] Dzenan Lapandic, Fengze Xie, Christos Verginis, Soon-Jo Chung, Dimos V. Dimarogonas and Bo Wahlberg, [Meta-Learning Augmented MPC for Disturbance-Aware Motion Planning and Control of Quadrotors](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 8, pp. 3045-3050, 2024.

[J164] Eleftherios Vlahakis, Lars Lindemann, Pantelis Sopasakis and Dimos V. Dimarogonas, [Conformal Prediction for Distribution-free Optimal Control of Linear Stochastic Systems](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 8, pp. 2835-2840, 2024.

[J163] Maria Charitidou and Dimos V. Dimarogonas, Virtual leader and distance based formation control with funnel constraints, *IEEE Transactions on Control of Network Systems*, 2024, to appear.

[J162] Adrian Wiltz, Fei Chen and Dimos V. Dimarogonas, Parallelized Robust Distributed Model Predictive Control in the Presence of Coupled State Constraints, *Automatica*, 2024, to appear.

[J161] Pedro Roque, Pedro Miraldo and Dimos V. Dimarogonas, Multi-Agent Formation Control using Epipolar Constraints, *IEEE Robotics and Automation Letters*, 2024, to appear.

[J160] Wei Ren, Raphael M. Jungers and Dimos V. Dimarogonas, [Zonotope-based Symbolic Controller Synthesis for Linear Temporal Logic Specifications](#), *IEEE Transactions on Automatic Control*, Vol. 69, No. 11, pp. 7630-7645, November 2024.

[J159] Dzenan Lapandic, Christos Verginis, Dimos V. Dimarogonas and Bo Wahlberg, Kinodynamic Motion Planning via Funnel Control for Underactuated Unmanned Surface Vehicles, *IEEE Transactions on Control Systems Technology*, 2024, to appear.

[J158] Xiao Tan, Antonis Papachristodoulou and Dimos V. Dimarogonas, A contract negotiation scheme for safety verification of interconnected systems, *European Journal of Control*, 2024, to appear.

[J157] Fei Chen and Dimos V. Dimarogonas, [On Topological Conditions for Enabling Transient Control in Leader-follower Networks](#), *Automatica*, Vol. 166, 111693, August 2024.

- [J156] Pushpak Jagtap and Dimos V. Dimarogonas, [Controller Synthesis against Omega-Regular Specifications: A Funnel-based Control Approach](#), *International Journal of Robust and Nonlinear Control*, Vol. 34, No. 11, pp. 7161-7173, July 2024.
- [J155] Fei Chen, Mayank Sewlia and Dimos V. Dimarogonas, [Cooperative control of heterogeneous multi-agent systems under spatiotemporal constraints](#), *Annual Reviews in Control*, Vol. 57, 100946, 2024.
- [J154] Chengshuai Wu, Meng Zhang and Dimos V. Dimarogonas, [On disturbance propagation in vehicular platoons with different communication ranges](#), *Automatica*, Vol. 165, 111665, July 2024.
- [J153] Pian Yu, Xiao Tan and Dimos V. Dimarogonas, [Continuous-time control synthesis under nested signal temporal logic specifications](#), *IEEE Transactions on Robotics*, Vol. 40, pp. 2272-2286, January 2024.
- [J152] Maria Charitidou and Dimos V. Dimarogonas, [Distributed MPC with continuous-time STL constraint satisfaction guarantees](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 8, pp. 211-216, 2024.
- [J151] Christos Verginis, Yiannis Kantaros and Dimos V. Dimarogonas, [Planning and Control of Multi-Robot-Object Systems under Temporal Logic Tasks and Uncertain Dynamics](#), *Robotics and Autonomous Systems*, Vol. 174, 104646, April 2024.
- [J150] Soulaïmane Berkane, Dionysios Theodosis, Tarek Hamel and Dimos V. Dimarogonas, [State Estimation for Linear Systems with Quadratic Outputs](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 7, pp. 3872-3877, 2023.
- [J149] Esteban Restrepo, Nana Wang and Dimos V. Dimarogonas, [Simultaneous Topology Identification and Synchronization of Directed Dynamical Networks](#), *IEEE Transactions on Control of Network Systems*, Vol. 11, No. 3, pp. 1491-1501, September 2024.
- [J148] Pian Yu, Yulong Gao, Frank J. Jiang, Karl H. Johansson and Dimos V. Dimarogonas, [Online Control Synthesis for Uncertain Systems under Signal Temporal Logic Specifications](#), *International Journal of Robotics Research*, Vol. 43, No. 6, pp. 765-790, May 2024.
- [J147] Yi Huang, Ziyang Meng and Dimos V. Dimarogonas, [Prescribed performance formation control for second-order multi-agent systems with connectivity and collision constraints](#), *Automatica*, Vol. 160, 111412, February 2024.
- [J146] Xiao Tan and Dimos V. Dimarogonas, [On the Undesired Equilibria Induced by Control Barrier Function Based Quadratic Programs](#), *Automatica*, Vol. 159, 111359, January 2024.
- [J145] Chengshuai Wu and Dimos V. Dimarogonas, [From Partial and Horizontal Contraction to k-Contraction](#), *IEEE Transactions on Automatic Control*, Vol. 69, No. 4, pp. 2391-2398, April 2024.

- [J144] Shankar Deka and Dimos V. Dimarogonas, [Supervised learning of Lyapunov functions using Laplace averages of approximate Koopman eigenfunctions](#), *IEEE Control Systems Letters (L-CSS)*, Vol. 7, pp. 3072-3077, 2023.
- [J143] Sriharsha Bhat, Chariklia Panteli, Ivan Stenius and Dimos V. Dimarogonas, [Nonlinear Model Predictive Control for Hydrobatics: Experiments with an Underactuated AUV](#), *Journal of Field Robotics*, Vol. 40, No. 7, pp. 1840-1859, October 2023.
- [J142] Marc Seidel, Michael Hertneck, Pian Yu, Steffen Linsenmayer, Dimos V. Dimarogonas and Frank Allgower, [A Window-based Periodic Event-triggered Consensus Scheme for Multi-agent Systems](#), *IEEE Transactions on Control of Network Systems*, Vol. 11, No. 1, pp. 414-426, March 2024.
- [J141] Wenceslao Shaw Cortez, Christos Verginis and Dimos V. Dimarogonas, [A Distributed, Event-triggered, Adaptive Controller for Cooperative Manipulation with Rolling Contacts](#), *IEEE Transactions on Robotics*, Vol. 39, No. 4, pp. 3120-3133, August 2023.
- [J140] Christos Verginis and Dimos V. Dimarogonas, [Control of Cooperative Manipulator-Endowed Systems under High-Level Tasks and Uncertain Dynamics](#), *Annual Reviews in Control*, Vol. 54, pp. 219-240, 2022.
- [J139] Farhad Mehdifar, Charalampos P. Bechlioulis, Julien M. Hendrickx and Dimos V. Dimarogonas, [2-D Directed Formation Control Based on Bipolar Coordinates](#), *IEEE Transactions on Automatic Control*, Vol. 68, No. 7, pp. 4175-4190, July 2023.
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- [C160] Kazumune Hashimoto, Shuichi Adachi and Dimos V. Dimarogonas, [Robust Safety Controller Synthesis using Tubes](#), *56th IEEE Conference on Decision and Control*, Melbourne, Australia, December 2017.
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