Domagoj Tolić

CONTACT
INFORMATION

Assistant Professor (Docent) & Senior Lecturer
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RESEARCH
INTERESTS

Hybrid Systems, Networked Control Systems, Nonlinear Control, Multi-Agent Systems, Robotics, Approximate Dynamic Programming, Reinforcement Learning

EDUCATION

University of New Mexico, Albuquerque, NM, USA
Ph.D., Electrical Engineering (Control Systems) **August 2008 − August 2012**
- Advisor: Professor Rafael Fierro
- Thesis Title: Estimation and Stability of Nonlinear Control Systems under Intermittent Information with Applications to Multi-Agent Robotics
- GPA: 4.16/4.00

University of Zagreb, Zagreb, Croatia
B.S., Mathematics **September 2005 − July 2008**
- GPA: 4.53/5.00

University of Zagreb, Zagreb, Croatia
M.S., Electrical Engineering **September 2005 − September 2007**
- Major: Control Systems
- Advisor: Professor Stjepan Bogdan
- Research Topic: Event-Driven Systems Employing a Matrix-Based Formalism
- GPA: 4.66/5.00

University of Zagreb, Zagreb, Croatia
B.S., Electrical Engineering **September 2002 − July 2005**

PROFESSIONAL
EXPERIENCE

Rochester Institute of Technology, Dubrovnik, Croatia

Senior Lecturer **October 2021 − present**
Lecturer **March 2017 − September 2021**
Adjunct Professor **September 2015 − March 2017**
Teaching the following IT courses: Computer Problem Solving for the Information Domain, Server Programming, Software Design Principles and Patterns, Foundations of Mobile Design, Foundations of Modern Information Processing, Web and Mobile.

University of Dubrovnik, Dubrovnik, Croatia

Postdoctoral Researcher **October 2015 − March 2017**
Within "EuRoC: European Robotics Challenge, Challenge 3", I focus on motion planning, surface inspection and reactive obstacle avoidance in 3D environments. Among 35 competing robotics teams, we finished up in the third place.

University of Melbourne, Melbourne, Australia

Honorary Fellow **November 2016**
Host: Professor Dragan Nešić, Deputy Head for Research & Industry Engagement of the Electrical and Electronic Engineering Department.

This part of my work focuses on control architectures that allow for greater delays in Networked Control Systems.

Technical University of Munich, Munich, Germany

Visiting Researcher **October 2013 − June 2014**
Host: Professor Sandra Hirche, Chair of Information-oriented Control

The part of my work developed during this period focuses on delays in Networked Control Systems.

University of Zagreb, Zagreb, Croatia

Postdoctoral Researcher **September 2012 − September 2015**
One part of my research, funded by the FP7 project ACROSS, extends and generalizes the ideas

developed during my PhD program. As of October 2014, the other part of my research is to design an adaptive autism spectrum disorder diagnostic protocol within the Autism Diagnostic Observation with Robot Evaluator (ADORE) project.

University of New Mexico, Albuquerque, NM, USA

Research Assistant   **August 2008 – August 2012**

My PhD is focused on stability and estimation under intermittent information for nonlinear control systems. Applications of the developed theory are in the area of multi-agent robotics. The utilized tools are : the small-gain theorem, Lp-stability, hybrid systems, switched systems, networked control systems, convex optimization, event-triggering, self-triggering, particle filtering, unscented Kalman filtering, geometric optimization, and algebraic graph theory.

Teaching Assistant
- **2009 - Spring**: ECE 446 - Design of Feedback Control Systems (Prof. Rafael Fierro)
- **2008 - Fall**: ECE 445 - Introduction to Control Systems (Prof. Rafael Fierro)

University of Zagreb, Zagreb, Croatia

Research Assistant   **September 2005 – September 2007**

My master thesis investigates Free Choice Multiple Reentrant Flowlines (FMRF) employing a matrix-based formalism.

AWARDS AND DISTINCTION
- Best paper award at the International Conference on Smart Systems and Technologies (SST) for the paper titled "Intermittent Information in Networked Control Systems" and co-authored with I. Palunko, October 2016
- Full scholarship for a PhD program at University of New Mexico, NM, USA, 2008 - 2012
- "Josip Lončar" award granted by the Faculty of Electrical Engineering and Computing, University of Zagreb, as the best student in Control Systems for the academic year 2004/05
- Scholarship from the Croatian Ministry of Science, Education and Sports in the category of particularly talented students in duration of 4 years starting in the academic year 2003/04

PUBLICATIONS

Journals

(J1) Weston, J.; **Tolić, D.**; Palunko, I.; "Application of Hamilton–Jacobi–Bellman Equation/Pontryagin's Principle for Constrained Optimal Control," Journal of Optimization Theory and Applications, Vol.200, No.2, pp. 437–462, 2024. (IF:1.8)

(J2) Nakić, I.; **Tolić, D.**; Tomljanović, Z.; Palunko, I.; "Numerically Efficient H_∞ Analysis of Cooperative Multi-Agent Systems," Journal of the Franklin Institute – Engineering and Applied Mathematics, Vol.359, No.16, pp. 9110-9128, 2022. (IF:4.246)

(J3) Palunko, I.; **Tolić, D.**; Prkačin, V.; "Learning Near-Optimal Broadcasting Intervals in Decentralized Multi-Agent Systems using Online Least-Square Policy Iteration," IET Control Theory & Applications, Vol.15, No.8, pp. 1054-1067, 2021. (IF:3.527)

(J4) **Tolić, D.**; "Stabilizing Transmission Intervals and Delays in Nonlinear Networked Control Systems through Hybrid-System-with-Memory Modeling and Lyapunov-Krasovskii Arguments," Nonlinear Analysis: Hybrid Systems, Vol.36, Article 100834, pp. 16, 2020. (IF:6.163)

(J5) Buşoniu, L.; de Bruin, T.; **Tolić, D.**; Kober, J.; Palunko, I.; "Reinforcement Learning for Control: Performance, Stability, and Deep Approximators," Annual Reviews in Control, Vol.46, pp. 8-28, 2018. (IF:4.759)

(J6) **Tolić, D.**; Palunko, I.; "Robustness of Nonlinear Control Systems to Network-Induced Imperfections," Technical Gazette, Vol.25, No.3, pp. 776-784, June 2018. (IF:0.644)

(J7) **Tolić, D.**; Palunko, I.; "Learning Suboptimal Broadcasting Intervals in Multi-Agent Systems," IFAC-PapersOnLine, Vol.50, No.1, pp. 4144-4149, July 2017. (IF:0.824)

(J8) Mamduhi, M. H.; Molin, A.; **Tolić, D.**; Hirche, S.; "Error-Dependent Data Scheduling in Resource-Aware Networked Control Systems," Automatica, Vol. 81C, pp. 209-216, July 2017. (IF:6.126)

(J9) **Tolić, D.**; Hirche, S.; "Stabilizing Transmission Intervals for Nonlinear Delayed Networked Control Systems," IEEE Transactions on Automatic Control, Vol.62, No.1, pp. 488-494, January 2017. (IF:5.007)

(J10) **Tolić, D.**; Sanfelice, R. G.; Fierro, R.; "Input-Output Triggered Control using Lp-Stability over Finite Horizons," International Journal of Robust and Nonlinear Control, Vol. 25, No. 14, pp. 2299-2327, September 2015. (IF:3.176)

(J11) **Tolić, D.**; Jeličić, V.; Bilas, V.; "Resource Management in Cooperative Multi-Agent Networks Through Self-Triggering," IET Control Theory & Applications, Vol.9, No.6, pp. 915-928, April 2015. (IF:2.337)

(J12) Haus, T.; Palunko, I.; **Tolić, D.**; Bogdan, S.; Lewis, F. L.; Mikulski, D. G.; "Trust-Based Self-Organizing Network Control," IET Control Theory & Applications, Special Issue: Recent developments in networked control and estimation, Vol.8, No.18, pp. 2126-2135, December 2014. (IF:2.048)

Books
(B1) **Tolić, D.**; Hirche, S.; "Networked Control Systems with Intermittent Feedback", CRC Press, Boca Raton, FL, 2017.

Book Chapters
(BC1) **Tolić, D.**; Palunko, I.; Ivanović, A.; Car, M.; Bogdan, S.; "Decentralized Cooperative Control in Degraded Communication Environments," in Control of Complex Systems: Theory and Applications, Elsevier, J. Vamvoudakis and S. Jagannathan (ed.), pp. 373-395, Chapter 12, 2016.

(BC2) Petric, F.; **Tolić, D.**; Miklić, D.; Kovačić, Z.; Cepanec, M.; Šimleša, S.; "Towards a Robot-Assisted Autism Diagnostic Protocol: Modelling and Assessment with POMDP," in Intelligent Robotics and Applications, Lecture Notes in Computer Science, Vol. 9245, Springer International Publishing (Switzerland); H. Liu, N. Kubota, X. Zhu, R. Dillmann, D. Zhou (ed.), pp. 82-94, 2015.

(BC3) Cortez, R. A.; **Tolić, D.**; Palunko, I.; Eskandari, N; Oishi, M; Fierro, R.; Wood, J.; "Framework for User–Guided Search and Adaptive Target Tracking via Cooperative UAVs," in Intelligent Systems for the AIAA Progress in Aeronautics & Astronautics Series, J. Valasek (ed.), pp. 445 - 469, 2012.

Conferences
(C1) Plugel, M.; **Tolić, D.**; "Neural Networks to Predict Software Development/Maintenance Performance and Required Time," International Conference on Software, Telecommunications and Computer Networks (SoftCOM), pp. 1-6, Split, Croatia, September 2023.

(C2) Pavlinić, B.; **Tolić, D.**; "Predicting Diffuse Horizontal Radiation with Neural Networks," International Conference on Smart Systems and Technologies (SST), pp. 127-132, Osijek, Croatia, October 2022.

(C3) Nakić, I.; **Tolić, D.**; Palunko, I.; Tomljanović, Z.; "Numerically Efficient Agents-To-Group H_∞ Analysis," Vienna International Conference on Mathematical Modelling (MATHMOD), pp. 199-204, Vienna, Austria, July 2022.

(C4) Bulić, D.; **Tolić, D.**; Palunko, I.; "Beam-Based Tether Dynamics and Simulations using Finite Element Model," IFAC Conference on Intelligent Control and Automation Sciences (ICONS), pp. 154-159, Cluj-Napoca, Romania, July 2022.

(C5) Weston, J.; **Tolić, D.**; Palunko, I.; "Mixed Use of Pontryagin's Principle and the Hamilton-Jacobi-Bellman Equation in Infinite- and Finite-Horizon Constrained Optimal Control," In: Petrović, I., Menegatti, E., Marković, I. (eds.) Intelligent Autonomous Systems 17. IAS 2022. Lecture Notes in Networks and Systems, vol. 577, pp. 167–185, 2023

(C6) Ambrušec, M.; **Tolić, D.**; Žagar, M.; "Deep Learning-Based Recommendation System in Tourism by Personality Type Using Social Networks Big Data," Creative Future Insights (CFI), pp. 42-59, Zagreb, Croatia, September 2021.

(C7) Mihaljević, B.; Žagar, M.; Mutka, A.; **Tolić, D.**; "On the Delivery of Software Development and Data Science Related Courses in Blended and Hybrid Formats," IATED International Technology, Education and Development Conference (INTED), pp. 6590-6600, Valencia, Spain, March 2021.

(C8) **Tolić, D.**; "Stabilizing Transmissions and Delays in Nonlinear Networked Control Systems: Hybrid Systems with Memory and Lyapunov Approach," IEEE Conference on Decision and Control (CDC), pp. 2842-2847, Miami Beach, FL, USA, December 2018.

(C9) **Tolić, D.**; Palunko, I.; "Intermittent Information in Networked Control Systems," International Conference on Smart Systems and Technologies (SST), pp. 269-274, Osijek, Croatia, October 2016, **best paper award**

(C10) Orsag, M.; Haus, T.; **Tolić, D.**; Palunko, I.; Ivanović, A.; Car, M.; Bogdan, S.; "Human-in-the-loop Control of Multi-Agent Aerial Systems," European Control Conference (ECC), pp. 2139-2145, Aalborg, Denmark, June-July 2016.

(C11) Petric, F.; **Tolić, D.**; Miklić, D.; Kovačić, Z.; Cepanec, M.; Šimleša, S.; "Towards a Robot-Assisted Autism Diagnostic Protocol: Modelling and Assessment with POMDP," International Conference on Intelligent Robotics and Applications (ICIRA), pp. 82-94, Portsmouth, England, August 2015.

(C12) **Tolić, D.**; Hirche, S.; "Stabilizing Transmission Intervals for Networked Control Systems with Nonlinear Delay Dynamics," IEEE Conference on Decision and Control (CDC), pp. 6196-6201, Osaka, Japan, December 2015.

(C13) **Tolić, D.**; Palunko, I.; Ivanović, A.; Car, M.; Bogdan, S.; "Multi-Agent Control in Degraded Communication Environments," European Control Conference (ECC), pp. 404-409, Linz, Austria, July 2015.

(C14) Mamduhi, M. H.; **Tolić, D.**; Hirche, S.; "Decentralized Event-Based Scheduling for Shared-Resource Networked Control Systems," European Control Conference (ECC), pp. 941-947, Linz, Austria, July 2015.

(C15) Mamduhi, M. H.; **Tolić, D.**; Hirche, S.; "Robust Event-Based Data Scheduling for Resource Constrained Networked Control Systems," American Control Conference (ACC), pp. 4695-4701, Chicago, IL, USA, July 2015.

(C16) **Tolić, D.**; Hirche, S.; "Stabilizing Transmission Intervals and Delays for Nonlinear Networked Control Systems: The Large Delay Case," IEEE Conference on Decision and Control (CDC), pp. 1203-1208, Los Angeles, CA, USA, December 2014.

(C17) Mamduhi, M. H.; **Tolić, D.**; Molin, A.; Hirche, S.; "Event-Triggered Scheduling for Stochastic Multi-Loop Networked Control Systems with Packet Dropouts," IEEE Conference on Decision and Control (CDC), pp. 2776-2782, Los Angeles, CA, USA, December 2014.

(C18) Haus, T.; Palunko, I.; **Tolić, D.**; Bogdan, S.; Lewis, F. L.; "Decentralized Trust-Based Self-Organizing Cooperative Control," European Control Conference (ECC), pp. 1205-1210, Strasbourg, France, June 2014.

(C19) **Tolić, D.**; Hirche, S.; "Stabilizing Transmission Intervals and Delays for Linear Time-Varying Control Systems: The Large Delay Case," Mediterranean Conference on Control and Automation (MED), pp. 686-691, Palermo, Italy, June 2014.

(C20) Jeličić, V.; **Tolić, D.**; Bilas, V.; "Consensus-based Decentralized Resource Sharing between Co-located Wireless Sensor Networks," IEEE International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. 1-6, Singapore, April 2014.

(C21) Sorrentino, F.; **Tolić, D.**; Fierro, R.; Picozzi, S.; Gordon, J.R.; Mammoli, A.; "Stability Analysis of a Model for the Market Dynamics of a Smart Grid," IEEE Conference on Decision and Control (CDC), pp. 4964-4970, Firenze, Italy, December 2013.

(C22) **Tolić, D.**; "Lp-Stability with Respect to Sets Applied Towards Self-Triggered Communication for Single-Integrator Consensus," IEEE Conference on Decision and Control (CDC), pp. 3409-3414, Firenze, Italy, December 2013.

(C23) **Tolić, D.**; Fierro, R.; "Decentralized Output Synchronization of Heterogeneous Linear Systems with Fixed and Switching Topology via Self-Triggered Communication," American Control Conference (ACC), pp. 4648-4653, Washington DC, June 2013.

(C24) **Tolić, D.**; Fierro, R.; Ferrari, S.; "Optimal Self-Triggering for Nonlinear Systems via Approximate Dynamic Programming," IEEE Multi-Conference on Systems and Control (MSC), pp. 879-884, Dubrovnik, Croatia, October 2012.

(C25) **Tolić, D.**; Sanfelice, R. G.; Fierro, R.; "Self-Triggering in Nonlinear Systems: A Small-Gain Theorem Approach," Mediterranean Conference on Control and Automation (MED), pp. 935-941, Barcelona, Spain, July 2012.

(C26) **Tolić, D.**; Fierro, R.; "Adaptive Sampling for Tracking in Pursuit-Evasion Games," IEEE Multi-Conference on Systems and Control (MSC), pp. 179 - 184, Denver, CO, September 2011.

(C27) **Tolić, D.**; Fierro, R.; "Stability of Feedback Linearization under Intermittent Information: A Target-Pursuit Case," American Control Conference (ACC), pp. 3184 - 3190, San Francisco, CA, June-July 2011.

(C28) Ferrari, S.; Fierro, R.; **Tolić, D.**; "A geometric optimization approach to tracking maneuvering targets using a heterogeneous mobile sensor network," IEEE Conference on Decision and Control (CDC) held jointly with the Chinese Control Conference (CCC), pp. 1080-1087, Shanghai, China, December 2009.

(C29) **Tolić, D.**; Fierro, R.; Ferrari, S.; "Cooperative multi-target tracking via hybrid modeling and geometric optimization," Mediterranean Conference on Control and Automation (MED), pp. 440-445, Thessaloniki, Greece, June 2009.

Technical Reports

(T1) **Tolić, D.**; Hirche, S.; "Stabilizing Transmission Intervals for Nonlinear Delayed Networked Control Systems [Extended Version]," technical report, arxiv.org/abs/1604.04421, April 2016.

(T2) **Tolić, D.**; Fierro, R.; "A Comparison of a Curve Fitting Tracking Filter and Conventional Filters under Intermittent Information," Department of Electrical and Computer Engineering, University of New Mexico, October 2010, technical report. [Online]. Available: http://hdl.handle.net/1928/11424

RESEARCH
PROJECTS

(P1) Participation in the realization phase of the Horizon-RIA project "ONE-BLUE – Integrated approach to assess the levels and impact of contaminants of emerging concern on BLUE health and biodiversity modulated by climate change drivers", grant agreement ID: 101134929, 2024 - 2027, budget: 6.2M EUR

(P2) Participation in the realization phase of the Horizon Europe project "SeaClear2.0 – Scalable Full-Cycle Marine Litter Remediation in the Mediterranean: Robotic and Participatory Solutions", grant agreement ID: 101093822, 2023 - 2026, budget: 8M EUR

(P3) Participation in the writing and realization phases of the ERASMUS+ KA107 project regarding modeling and analysis of three-dimensional movements of fluid flows between RIT Croatia and Clarkson University, Potsdam, NY, USA, 2020-2023, budget: 3k EUR

(P4) Participation in the writing and realization phases of the Croatia-Slovenia bilateral project "TRACE - Phylogenetic Reconstruction using Gaussian Processes" between Univ. of Dubrovnik and Jožef Stefan Institute, 2020-2021, budget: 4k EUR

(P5) Participation in the writing and realization phases of the H2020 project "SeaClear – Search, Identification and Collection of Marine Litter with Autonomous Robots", grant agreement ID: 871295, 2020 - 2023, budget: 5M EUR

(P6) Participation in the writing and realization phases of the Croatia-Germany bilateral project "Optimal Design and Nonlinear Control of Autonomous Underwater Vehicle (ROADIE)" between University of Dubrovnik and Technical University of Munich, 2018 - 2019, budget: 17k EUR

(P7) Participation in the writing and realization phases of the "ConDyS: Control of Dynamical Systems" project funded by Croatian Science Foundation (IP-2016-06-2468), 2017 - 2021, budget: 130k EUR

(P8) Participation in the realization phase of the "MORUS: Unmanned system for maritime security and environmental monitoring" project funded by NATO grant SfP - 984807, 2015 - 2018, budget: 394k EUR

(P9) Participation in the realization phase of the "EuRoC: European Robotics Challenge, Challenge 3" challenge funded by the European Union's FP7 grant agreement No. 608849, 2014 - 2017, budget: 368k EUR

(P10) Participation in the writing and realization phases of the "ADORE: Autism Diagnostic Observation with Robot Evaluator" project funded by Croatian Science Foundation (HRZZ-93743-2014), 2014 - 2018, budget: 130k EUR

(P11) Participation in the writing and realization phases of the project titled "Coordination and Control of Multi-Agent Systems". This is a joint project involving the LARICS robotics lab from the University of Zagreb and the research group of Prof. Ji-Feng Zhang from Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, 2014 - 2015, budget: 7k EUR

(P12) Participation in the writing and realization phases of the AFOSR Grant FA8655-13-1-3055 titled "Human-in-the-loop Control of Multi-Agent Aerial Systems Under Intermittent Communication" funded by Space Technology & Control Sciences European Office of Aerospace Research and Development (EOARD) which is a detachment of Air Force Office of Scientific Research (AFOSR), 2013 - 2015, budget: 70k EUR

(P13) Participation in the realization phase of the FP7 project ACROSS under grant No. 285939 (ACROSS), 2012-2014, budget: 3.75M EUR

(P14) Participation in the realization phase of "Collaborative Research: An Adaptive Dynamic Programming Approach to the Coordination of Heterogeneous Robotic Sensors Networks" funded by National Science Foundation (NSF), Award 1027775, 2010-2012, budget: 225k USD

(P15) Participation in the realization phase of "CAREER: Coordination of Dynamic Networks - A Hybrid System Approach" funded by National Science Foundation (NSF), Award 0811347, 2008 - 2010, budget: 170k USD

PROGRAMMING	C, C++, Java, Matlab, Simulink, Robot Operating System (ROS), Python, Mathematica, LaTeX 2$_\varepsilon$, HTML, CSS, Ionic, Docker, PHP, Flutter

INVITED TALKS

(IT1) "Combining the Pontryagin's Principle and Hamilton-Jacobi-Bellman Equations for Constrained Optimal Control", Mathematical Department, University of Osijek, Osijek, Croatia, March 9, 2023.

(IT2) "Stabilizing Transmission Intervals and Delays in Nonlinear Networked Control Systems through Hybrid-System-with-Memory Modeling and Lyapunov-Krasovskii Arguments", Eindhoven University of Technology, Netherlands, June 19, 2019.

(IT3) "Nonlinear and Networked Control Systems", Clarkson University, Potsdam, NY, USA, May 28, 2019.

(IT4) "Stabilizing Transmissions and Delays in Nonlinear Networked Control Systems: Hybrid Systems with Memory and Lyapunov Approach", Technical University of Munich, Munich, Germany, July 24, 2018.

(IT5) "Towards Optimal Information Exchange Instants in Multi-Agent Systems", Centre de Recherche en Automatique de Nancy (CRAN), Nancy, France, June 26, 2017.

(IT6) "Towards Optimal Information Exchange Instants in Multi-Agent Systems", Technical University of Munich, Munich, Germany, June 13, 2017.

(IT7) "Intermittent and Delayed Information in Nonlinear Networked Control Systems", Electrical and Electronic Engineering Department, University of Melbourne, Australia, November 1, 2016.

(IT8) "Optimal Intermittent Feedback in Networked Control Systems via Approximate Dynamic Programming", Department of Automation, Technical University of Cluj-Napoca, Romania, June 16, 2016.

(IT9) "Nonlinear Networked Control Systems with Intermittent and Delayed Information", Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, China, December 2, 2015.

(IT10) "Networked Control Systems: Intermittent and Delayed Information", Faculty of Electrical Engineering, University of Osijek, Osijek, Croatia, March 16, 2015.

(IT11) "Realistic Information in Control Systems – Intermittent, Delayed and Distorted", Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, China, September 4, 2014.

(IT12) "Self-Triggering for Nonlinear Systems Employing Lp-stability", Technical University of Munich, Munich, Germany, October 30, 2013.

PROFESSIONAL ACTIVITIES

- a member of the Program Committee for 2024 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2024), Cluj-Napoca, Romania
- a member of the Program Committee for the International Conference on Smart Systems and Technologies (SST 2022, 2024), Osijek, Croatia
- Associate Editor for the 6th IFAC Conference on Intelligent Control and Automation Sciences (ICONS 2022), Cluj-Napoca, Romania

REVIEW ACTIVITIES

Funding Agencies
- the National Fund for Scientific and Technological Research (FONDECYT) of the National Research and Development Agency (ANID) of the Science, Technology, Knowledge and Innovation Ministry of Chile (2020, 2021, 2023)

Fellowships
- Bayreuth Humboldt Center (2023)

Journals
- IFAC Automatica (2012, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)
- IEEE Transactions on Automatic Control (TAC 2009, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024)
- IEEE Control Systems Letters (L-CSS 2017, 2018, 2019, 2022)
- IEEE Transactions on Systems, Man, and Cybernetics: Systems (SMCA 2020)
- IEEE Transactions on Systems, Men, and Cybernetics - Part B (2009, 2010) → IEEE Transactions on Cybernetics (TCYB 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024)

- IEEE Transactions on Control Systems Technology (TCST 2016, 2017)
- International Journal of Robust and Nonlinear Control (IJRNC 2010, 2018)
- IEEE Access (2018)
- IEEE Transactions on Signal and Information Processing over Networks (SIPN 2021)
- Communications in Nonlinear Science and Numerical Simulation (CNSNS 2016, 2018, 2021)
- Sensors (2020)
- Transactions on Fuzzy Systems (TFS 2024)
- Nonlinear Analysis: Hybrid Systems (NAHS 2015, 2016, 2024)
- International Journal of Control (TCON 2018, 2019, 2021, 2022, 2023, 2024)
- Nonlinear Dynamics (NODY 2022, 2023, 2024)
- Journal of Intelligent and Robotic Systems (JINT 2011)
- International Journal of Robotics Research (IJRR 2012)
- Engineering Applications of Artificial Intelligence (EAAI 2018, 2019, 2023, 2024)
- IEEE Control Systems Magazine (CSM 2012)
- IET Control Theory & Applications (IET CT&A 2014, 2017, 2018)
- IEEE Transactions on Control of Network Systems (TCNS 2014, 2015, 2016, 2020)
- Transactions of the Institute of Measurement and Control (TIMC 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2022, 2023, 2024)
- IEEE Transactions on Industrial Informatics (TII 2018, 2019, 2020, 2022, 2023)
- Applied Soft Computing Journal (ASOC 2021)
- Advances in Continuous and Discrete Models: Theory and Applications (AIDE 2024)
- Asian Journal of Control (AJC 2018, 2022)
- IEEE Transactions on Circuits and Systems I (TCAS-I 2012)
- Circuits, Systems & Signal Processing (CSSP 2021, 2022)
- Applied Sciences (2019)
- Mathematical Reviews (MR 2020, 2021, 2022)
- Control and Intelligent Systems (CIS 2017)
- Advances in Mechanical Engineering (AME 2017)
- Journal of Control Theory and Technology (CTT 2014)
- Journal of Defense Modeling and Simulation (JDMS 2010)
- Chaos, Solitons & Fractals by Elsevier (CHAOS 2017)
- AUTOMATIKA: Journal for Control, Measurement, Electronics, Computing and Communications (2014, 2015, 2018, 2019)
- RIThink (2017)
- Interdisciplinary Description of Complex Systems (INDECS 2017)
- Science China Information Sciences (SCIS 2022)

Conferences
- IEEE International Conference on Robotics and Automation (ICRA 2010, 2012, 2024)
- IEEE International Conference on Intelligent Robots and Systems (IROS 2010, 2012, 2015)
- IEEE Conference on Decision and Control (CDC 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2022, 2024)
- IEEE American Control Conference (ACC 2013, 2014, 2015, 2017, 2021, 2024)
- European Control Conference (ECC 2013, 2014, 2015, 2016, 2018, 2019, 2020, 2021, 2022, 2024)
- IEEE Multi-conference on Systems and Control (MSC 2011, 2012, 2013, 2014)
- International Conference on Hybrid Systems: Computation and Control (HSCC 2014)
- IEEE Mediterranean Conference on Control and Automation (MED 2015, 2018)
- IFAC World Congress (IFAC WC 2017, 2020, 2023)
- IEEE International Conference on Control and Automation (ICCA 2020)
- Asian Control Conference (ASCC 2017)

- IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2024)
- Neural Information Processing Systems (NIPS 2018)
- IEEE Conference on Control Technology (CCTA 2017)
- International Conference on Smart Systems and Technologies (SST 2017, 2022, 2024)
- International Conference on Information, Communication and Automation Technologies (ICAT 2017)
- IEEE Haptics Symposium (HAPTICS 2018)
- International Conference on Systems, Signals and Image Processing (IWSSIP 2019)

LANGUAGE SKILLS
- Croatian - native
- English - excellent in writing and speaking
- Spanish - intermediate in writing and speaking
- German - basic in writing and speaking