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Department of Computer Science, Electrical and Space Engineering
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Curriculum Vitae

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Updated 1/1/2022

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1. Personal Information

1.1 Contact Information

Name: George Nikolakopoulos

Date of Birth: 9/10/1976

Place of Birth: Athens, Greece

Marital Status: Married

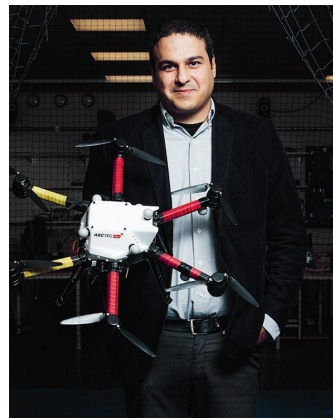
Nationality: Greek

Email: geonik@ltu.se

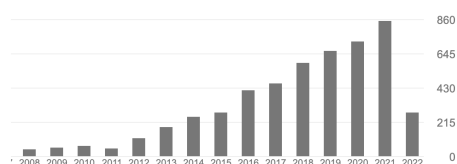
Homepage: www.gnikolak.com

Team: www.ltu.se/robotics

Researcher unique identifier(s): ORCID:0000-0003-0126-1897



	All	Since 2017
Citations	5147	3565
h-index	33	28
i10-index	103	82



1.2 Current Employment

I intensively work to make my dreams true.

In parallel, I work as a Chair Professor in Robotics and Artificial Intelligence (RAI), while heading the Robotics Team at the Division of Systems and Interaction in the Department of Computer Science, Electrical and Space Engineering, Luleå University of Technology, Sweden.

I was also affiliated with the NASA Jet Propulsion Laboratory (JPL) at Pasadena, California for contacting collaborative research on Aerial Planetary Exploration. My team participates in the DARPA Grand challenge on Sub-T exploration with the COSTAR¹ team of NASA where we have won the second stage of the competition in February 2020.

I am also a member of the Board of Directors at euRobotics², as a member of the Scientific Council of ARTEMIS³ in the field of Robotics and AI, a member of the IFAC TC on Robotics. an elected expert for the permanent working group (PWG) of A.SPIRE⁴ with a focus on Process Optimisation and Ultra Carbon Coal, as well as an elected member on the Aeneas-XECS in embedded control systems.

I have established the Digital Innovation Hub on Applied AI⁵ at Luleå University of Technology, and created 2 spin-offs, where FieldRobotix has been selected from IVA to join the REACHME

¹ <https://costar.jpl.nasa.gov/>

² <https://www.eu-robotics.net/>

³ <https://artemis-ia.eu/>

⁴ <https://www.spire2030.eu/>

⁵ <https://www.ltu.se/research/ai?l=en>

Silicon Valley accelerator. My Team's work has been included 3 times in a row at IVA top 100 list.

My main research interests are in the areas of: Robotics and AI, Field Robotics, UAVs, Automatic Control Applications, Learning, Reasoning, Networked Embedded Controlled Systems, Wireless Sensor and Actuator Networks, Cyber Physical Systems, Mechatronics, Adaptive Control, System Identification and Multimedia Wireless Sensor Networks and Cyberphysical systems.

1.3 Previous Employment in Academia⁶

Duration	Description
1/6/2020 - current	Chair Professor Robotics and AI
1/5/2016 – 31/5/2020	Professor on Robotics and Automation Department of Computer Science Electrical and Space Engineering, Luleå University of Technology, Sweden.
1/12/2018 – 31/12/2020	NASA Jet Propulsion Laboratory Affiliated Researcher
1/1/2013-1/5/2016	Associate Professor - Department of Computer Science Electrical and Space Engineering, Luleå University of Technology, Sweden.
1/6/2011- 31/12/2013	Assistant Professor - Department of Computer Science Electrical and Space Engineering, Luleå University of Technology, Sweden.
21/02/2011 – 31/06/2011	Adjunct Lecturer – Department of Electrical & Computer Engineering, University of Patras, Greece <i>Course:</i> “Digital Control Systems”
4/11/2009 – 31/7/2010	Assistant Professor – Faculty of Technological Applications, Department of Energy Technology, Technological Institute of Athens, Greece <i>Course:</i> “Automatic Control Systems”
08/10/2009 – 31/07/2010	Adjunct Lecturer – Department of Electrical & Computer Engineering, University of Patras, Greece <i>Courses:</i> “Automatic Control Systems I” “Automatic Control Systems II”
14/01/2009- 31/8/2009	Adjunct Lecturer – Department of Electrical & Computer Engineering, University of Patras, Greece <i>Courses:</i> “Automatic Control Systems I” “Automatic Control Systems II”
13/11/2007- 22/2/2008	Adjunct Lecturer – Department of Electrical & Computer Engineering, University of Patras, Greece

⁶ The Professorship position are provided with respect to the USA categorization
http://en.wikipedia.org/wiki/Professor#Non-tenure-track_positions

	Courses: “Robust Control”
2/4/2007-31/8/2007	Adjunct Lecturer – Department of Electrical & Computer Engineering, University of Patras, Greece
	Courses: “Automatic Control Systems II”

1.4 Previous Employment in Industry

Duration	Description
1/10/2007-1/7/2008	Company: ZENON S.A. Robotics and Automation (www.zenon.gr) Position: Director of the Electrical and Electronic Team at the R&D Division
01/10/2005-31/01/2007	Company: Glafcos Marine Ltd. (www.glafcos-marine.com)` Position: Director of the R&D Division
01/11/2003-30/09/2005	Company: Glafcos Marine Ltd. (www.glafcos-marine.com) Position: Software Manager in the R&D Division

1.5 Research Experience / Participation in Research Programs

Duration	Description
16/06/2021 - current	Board of Directors member euRobotics
1/20/2022- Current	Expert in the Permanent Working Group (PWG) of SPIRE on Process Optimization and CCU.
22/12/2021 - current	Member of Aeneas – Xecs Technical Expert Group
1/9/2020 – 31/10/2021	Member of the A.SPIRE task force on Change
1/12/2018 - current	Member of the ARTEMIS scientific council (6 members in Europe)
1/12/2018	Luleå University Representative at the EuRobotics PPP
1/1/2019	Head of the Luleå University of Technology Excellence area of Intelligent Industrial Processes
1/11/2018 - current	2018 DARPA Sub Terrain challenge in collaboration with NASA/JPL
1/4/2017 - current	Principal investigator H2020 project SIMS
1/9/2015	Principal investigator FETopen in H2020 Project Complnova
1/1/2015	Project Coordinator H2020 Project AEROWORKS

1/1/2015	Project Coordinator H2020 Project DISIRE
1/1/2015	Principal Investigator for the project «New understanding of Motor Control and Falls by Novel Postural Sway Analysis, Robotics and Mathematical modeling» funded by the Swedish Research Council, Vetenskapsrådet 2014.
1/10/2013 - Current	Founder of Working Group on Motor Control and Biomechanics at Luleå University of Technology: http://www.ltu.se/research/Working-groups/Motor-Control-and-Biomechanics?!=en
1/2/2014 - Current	Project Manager – ARTEMIS R5-COP: Reconfigurable ROS based Resilient Reasoning Robotic Cooperating Systems, http://www.r5-cop.eu/en/
1/1/2014 – 31/1/2017	Project Manager – Robotic Pneumatic Dancer
1/1/2012- 31/6/2012	Project Manager: Mine Patrolling Rovers, funded by the Hjalmar Lundbohm Research Center (HLRC) http://www.hlrc.se/en/Projects/Mine-Patrolling-Rovers/
1/1/2012 – 31/1/2014	EQoREF: Energy and Quality Oriented Modeling and Control of Refiners
1/6/2011- 16/12/2011	Smart Mine of the Future –SMIFU-II, Funded by the Rock Technology Center (RTC) - http://www.rocktechcentre.se/?q=node/9 WP-1: Zero Entry Production Area WP11: Integrated Process Control
24/01/2006- 1/6/2011	Post Doc Researched at the Laboratory of Automation and Robotics, Department of Electrical and Computer Engineering, University of Patras, Greece
1/03/2007- 31/07/2009	Researcher at the R&D Division of ZENON S.A. Robotics and Automation (www.zenon.gr)
7/2/2006 - 7/2/2007	Researcher at the Bureau of Research and Technology of the Greek Naval Army (GETEN), Athens, Greece
1/2003 – 12/2006	Graduate Fellow, (Herakleitos Program), founded by the greek Greek Ministry's of Education, EPEAEK II, contract number #2782#, Design and Development of Networked Controlled Systems
1/2001- 12/2004	Graduate Fellow, (Karatheodoris Program), Research Committee, University of Patras, contract number #2782#, Design and Development of Reconfigurable Control Schemes
01/04/2008- 30/10/2008	Researcher in the Industrial Systems Institute (ISI) for the project “Industrial Control”
01/10/2007 – 31/07/2009	Project Manager/Researcher at the European Research Project “CommRob” (Advanced Behavior and High-Level Multimodal Communication with and among Robots), STREP - IST #045441#, http://www.commrob.eu/
01/02/2007 – 31/07/2009	Project Manager/Researcher at the European Research Project “C@R” (Collaboration at Rural), IP-IST #34921#, http://www.c-rural.eu
01/10/2007- 31/12/2008	Project Manager/Researcher at the European Research Project “SYMBIOSIS-EU” (Scientific Synergism of Nano-Bio-Info-Cogni Science for an Integrated System to Monitor Meat Quality and Safety During Production, Storage, and Distribution in the EU. STREP, http://www.symbiosis-eu.net/

01/06/2007-31/12/2008	Project Manager/Researcher at the Hellenic Research Project “ΔΙΑΝΟΗΜΑ” (Optical Analysis and Sign Recognition for Sign Language Modeling and its Applications in Robot Teleoperation” , http://dianoema.zenon.gr/
01/10/2005-01/5/2006	Researcher at the European Research program “COMPASS”, contract number #G3RD-CT-2002-00809#, Developing of a sea sick measurement system.
01/10/2004-30/4/2007	Researcher at the European Research program “RUNES”, (Reconfigurable Ubiquitous Networked Controlled Systems) IST-004536 http://www.ist-runes.org/
01/11/2005-31/10/2006	Researcher at the European Research program “HYCON” (Hybrid Control), FP6-IST-511368, http://www.ist-hycon.org/
01/09/2001-01/07/2003	Researcher at the European Project “OPTINAV” (Optimal Navigation) Strep FP6-IST-29459, http://cordis.europa.eu/fetch?CALLER=PROJ_ICT&ACTION=D&CAT=PROJ&RCN=57179
1/1999 - 12/2000	Researcher in the European Research Program “WINGEM” (Wind Generators), Design and development of algorithms for the fuzzy and neural control of a flywheel.
9/2000-11/2000	Researcher at the European Research Program “PSIM” Contract Number #60004#

2. National and International Prizes

1. Ministry of Merchant Marine Award (1998,1999,2000,2001)
2. Top 5% in graduating class (1998,99,2000)
3. Technical Chamber of Greece Award (2000)
4. **IST Best paper award**, at the ECC 2003 conference, for the paper that best promotes the scopes and the aim of the Information Society Technologies, see C14
5. Journal [J1] ranked in the 25 Most Downloaded paper (Rank 1) in the Journal Mathematics and Computers in Simulation during January-May 2003
6. Journal [J1] ranked in the 25 Most Downloaded paper (Rank 2) in the Journal Mathematics and Computers in Simulation during January-December 2003
7. Best presentation award at the ICIT’04 conference, for the C22 publication
8. Journal [J9] ranked in the 25 Most Downloaded paper (Rank 10) in the Journal Control Engineering Practice, September 2008
9. 2nd Position in the 1st Greek World Robot Olympiad WRO (Category-Universities) (<http://www.wrohellas.gr/>), 1 May 2009, Technopolis, Gazi, Athens, Greece
10. Journal [J14] ranked in the most read articles in the Journal of Control Engineering Practice (CEP), December 2012.
11. Journal [J14] ranked in the Top 25 Hottest Articles in Journal of Control Engineering Practice during July to September 2011.
12. Journal [J14] ranked in the Top 25 Hottest Articles in Journal of Control Engineering Practice during October to December 2011.
13. Journal [J14] ranked in the Top 25 Hottest Articles in Journal of Control Engineering Practice during January to March 2012.

14. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 12) in Journal of Control Engineering Practice during April to June 2012.
15. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 9) in Journal of Control Engineering Practice during October to December 2012.
16. **Nominated as best Supervisor for the year 2012 at Luleå University of Technology.**
17. Conference article [C79] received the “Highly Commended Award” from the Assemble Automation Journal, Published by Emerald. The prize includes an invitation and guarantee of publication in the Assembly Automation Journal, as also a year’s free online access to Emerald’s advanced automation portfolio.
18. **Journal [J14] ranked No. 10 in the 2012 list of Top 25 Hottest Articles in the Journal of Control Engineering Practice, Elsevier.**
19. Conference article [C82] has been selected in the top 10 articles in the IEEE conference on Control, Decision and Information Technologies, Tunisia, 2013 and has been selected to be included in the International Journal of Systems Dynamics Applications, IGI Global.
20. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 20) in the Journal of Control Engineering Practice during January to March 2013.
21. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 25) in the Journal of Control Engineering Practice during April to June 2013.
22. Conference article [C86] has been selected in the top articles of the 10th International Conference on Informatics in Control, Automation and Robotics, Reykjavik, Iceland, 29-31, July, 2013 and has been selected to be included in a Springer’s Book Series on Electrical Engineering.
23. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 20) in the Journal of Control Engineering Practice during July to September 2013.
24. **Nominated for Wallenberg Academy Fellows 2014 from Luleå University of Technology (LTU) (One of the 2 Academic nominees from LTU and out of the 16 in total engineering nominations in Sweden).**
25. Journal [J30] ranked in the Top 25 Hottest Articles (Rank 7) in the Journal of Control Engineering Practice during October to December 2013.
26. **Journal [J14] ranked No. 15 in the 2013 list of Top 25 Hottest Articles in the Journal of Control Engineering Practice, Elsevier.**
27. **Journal [18] has been awarded the 2014 Premium Award for Best Paper in IET Control Theory and Applications, Elsevier. This is a Premium Award to recognize the best research papers published during the last two years in the Journal.**
28. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 20) in the Journal of Control Engineering Practice during April to June 2013.
29. **In 2015 I have granted a FETopen Project in H200 entitled Complnnova in the robotic inspection of Aircrafts**
30. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 14) in the Journal of Control Engineering Practice during July to September 2015.
31. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 25) in the Journal of Control Engineering Practice during April to June 2015.

32. Journal [J14] ranked in the Top 25 Hottest Articles (Rank 14) in the Journal of Control Engineering Practice during January to March 2015.
 33. Our article "[Switching Model Predictive attitude control for a quadrotor helicopter subject to atmospheric disturbances](#)" [J14] has been listed as No. 3 in the Most Cited Control Engineering Practice (CEP) articles from 2011. The full list of articles can be found at this [link](#).
 34. Our article "**Survey on Computer Vision for UAVs: Current Developments and Trends**" has been listed as No.2 in the 10 Most Downloaded Articles of Springer in the area of Robotics and Control in 2017. Article Link: <https://link.springer.com/article/10.1007/s10846-017-0483-z>
 35. *Our work on Autonomous Aerial Inspection of Wind Turbines has been selected to be featured in the top engineering achievements in 2017 from the Swedish Royal Academy of Engineers (IVA - <https://www.iva.se/>). The full announcement is located in the video below and we are featured at 56.05 min in the film.*
 36. *Selected in the Top 100 Innovators list in Sweden in 2019, for work on autonomous aerial inspection of infrastructures*
 37. *DISIRE Horizon 2020 has been selected in the list of World Alliance for the Top 1000 Solutions that will create an impact on earth.*
 38. *Listed in the FOCUS top 100 Most Cited Researchers in the Field of Mathematics and Technologies 2019.*
 39. *Awarded the "Innovator of the year for Luleå, Sweden in 2019"*
-
40. IVA Mentor 2019
-
41. *Selected in the Top 100 Innovators list in Sweden in 2020, for work on autonomous aerial inspection of underground environments.*
 42. *Listed in the TOP 100 list for the Swedish Royal Academy of Engineers for 2020 and for the work "Aerial Autonomous Inspection of Ore Passes"*
-
43. *The Horizon 2020 Innovation Radar service has identified the "Semi-Autonomous Flying of Unmanned Aerial Vehicles for Inspection Activities in Mines" as a significant innovative result from the project Horizon Project SIMS.*
 44. *The Horizon 2020 Innovation Radar service has identified the "5G communication network for application in underground mining environment" as a significant innovative result from the project Horizon Project SIMS.*
 45. *The Horizon 2020 Innovation Radar service has identified the "Vortex Robot for Aerospace Inspection and Repair" as a significant innovative result from the project Horizon Project Compinnova.*
-
46. **Won the 2nd Challenge of the DARPA SubT Challenge with the CoSTAR Team lead by JPL/NASA**
-
47. *The Horizon 2020 Innovation Radar service has identified in the SIMS Horizon project that our technology "Semi-Autonomous Flying of Unmanned Aerial Vehicles for Inspection Activities in Mines" as a significant innovative result with a high market potential.*
 48. *My former Phd Student Sina Sharif Mansouri has been rewarded the "Best Phd Dissertation in 2021" from Vattenfall.*

3. Publications

3.1 Monographs

- [M1] **G. Nikolakopoulos**, “*Adaptive Control of Varying Systems*”, Ph.D. Dissertation, Department of Electrical & Computer Engineering, University of Patras, Greece, 24 January 2006.
- [M2] **G. Nikolakopoulos**, “*Intelligent Control of a Flywheel*”, Master Thesis, Department of Electrical & Computer Engineering, University of Patras, Greece, 24 January 2000.

3.2 Books

- [B1] S. Manesis and G. Nikolakopoulos, “*Introduction to Industrial Automation and Control*”, Taylor and Francis, 2016 ISBN: 978-1-4987-0540-0.
- [B2] G. Nikolakopoulos, “*The era of Aerial Robotic Workers*”, Elsevier, to be finalized in 2019
- [B3] G. Nikolakopoulos and et. All, “*Volume 1: Imaging and Sensing for Unmanned Aircraft Systems: Control and Performance*”, IET Book series, to be finalized in 2020
- [B4] G. Nikolakopoulos and et. All, “*Volume 2: Imaging and Sensing for Unmanned Aircraft Systems: Deployment and Applications*”, IET Book series, to be finalized in 2020

3.3 Peer-Reviewed Publications in International Journals

- [J75] B. Lindqvist, S. Karlsson, A. Koval, I. Tevetzidis, J. Haluska, C. Kanellakis, A. Agha-Mohammadi, **G. Nikolakopoulos**, “*Multimodality robotic systems: Integrated combined legged-aerial mobility for subterranean search and rescue*” in the proceedings of the Robotics and Autonomous Systems journal, May 2022.
- [J74] A. Papadimitriou, S. S. Mansouri, and **G. Nikolakopoulos**, “*Range-aided Ego-centric Collaborative Pose Estimation for Multiple Robots*” in the proceedings of the Expert Systems with Applications. Elsevier, 2022.
- [J73] J. Haluska, A. Koval and **G. Nikolakopoulos**, “*On the Unification of Legged and Aerial Robots for Planetary Exploration Missions*”, in the proceedings of the Journal of Applied Sciences, 2022.
- [J72] B. Lindqvist, C. Kanellakis, S. S. Mansouri, A. Agha-Mohammadi, and **G. Nikolakopoulos**, “*COMPRA: A COMPact Reactive Autonomy framework for subterranean MAV based search-and-rescue operations*”, in the proceedings of the Journal of Robotics and Intelligent Systems (JINT), Springer, 2022.
- [J71] A. Papadimitriou, H. Jafari, S. Mansouri and **G. Nikolakopoulos**, “*External force estimation and disturbance rejection for Micro-Aerial Vehicles*”, in the Proceedings of the Expert Systems with Applications Journal, Elsevier, 2022.
- [J70] A. Koval, S. Karlsson and **G. Nikolakopoulos**, “*Experimental evaluation of autonomous Map-Based Spot navigation in Confined environments*”, in the Proceedings of the Biomimetic Intelligence and Robotics, Elsevier, 2022.
- [J69] A. Banerjee, S. Satpute, C. Kanellakis, I. Tevetzidis, J. Haluska, P. Bodin, and **G. Nikolakopoulos**, “*On the Design, Modeling and Experimental Verification of a Floating Satellite Platform*”, in the proceedings of the IEEE Robotics and Automation Letters, 2021.
- [J68] M. Mukherjee, A. Banerjee, A. Papadimitriou, S. Mansouri and **G. Nikolakopoulos**, “*A Deventralized Sensor Fusion Scheme for Multi-Sensorial Fault Resilient pose Estimation*”, in the Proceedings of the Sensors Journal, MDPI, 2021.
- [J67] B. Lindqvist, S.S. Mansouri, J. Haluska and **G. Nikolakopoulos**, “*Reactive Constrained Navigation of an Unmanned Aerial Vehicle with Geometric Constraints*”, in the Proceedings of IEEE Transactions on Control Systems Technology, 2021.

- [J66] A. Papadimitriou, G. Andrikopoulos, and **G. Nikolakopoulos**, “*On the Optimal Adhesion Control of a Vortex Climbing Robot*”, *Journal of Intelligent and Robotic Systems*, Vol. 102, No. 3, No. 57, 2021.
- [J65] “*NeBula: Quest for Robotic Autonomy in Challenging Environments; TEAM CoSTAR at the DARPA Subterranean Challenge*”, Ali Agha, Kyohei Otsu, Benjamin Morrell, David D. Fan, Rohan Thakker, Angel Santamaria-Navarro, Sung-Kyun Kim, Amanda Bouman, Xianmei Lei, Jeffrey Edlund, Muhammad Fadhil Ginting, Kamak Ebadi, Matthew Anderson, Torkom Pailevanian, Edward Terry, Michael Wolf, Andrea Tagliabue, Tiago Stegun Vaquero, Matteo Palieri, Scott Tepsuporn, Yun Chang, Arash Kalantari, Fernando Chavez, Brett Lopez, Nobuhiro Funabiki, Gregory Miles, Thomas Touma, Alessandro Buscicchio, Jesus Tordesillas, Nikhilesh Alatur, Jeremy Nash, William Walsh, Sunggoo Jung, Hanseob Lee, Christoforos Kanellakis, John Mayo, Scott Harper, Marcel Kaufmann, Anushri Dixit, Gustavo Correa, Carlyn Lee, Jay Gao, Gene Merewether, Jairo Maldonado-Contreras, Gautam Salhotra, Maira Saboia Da Silva, Benjamin Ramtoula, Yuki Kubo, Seyed Fakoorian, Alexander Hatteland, Taeyeon Kim, Tara Bartlett, Alex Stephens, Leon Kim, Chuck Bergh, Eric Heiden, Thomas Lew, Abhishek Cauligi, Tristan Heywood, Andrew Kramer, Henry A. Leopold, Chris Choi, Shreyansh Daftry, Olivier Toupet, Inhwon Wee, Abhishek Thakur, Micah Feras, Giovanni Beltrame, **George Nikolakopoulos**, David Shim, Luca Carlone, Joel Burdick, *Journal of Field Robotics*, April, 2021.
- [J64] S. G. Satpute, P. Bodin and **G. Nikolakopoulos**, “*Cooperative Planning for Multi-site Asteroid Visual Coverage*”, in the proceedings of the *Advanced Robotics Journal*, Taylor and Francis, 2021.
- [J63] C. Kanellakis, S.S. Mansouri, P. Karvelis, A. Agha and **G. Nikolakopoulos**, “*Towards autonomous aerial scouting using multi-rotors in subterranean tunnel navigation*”, in the proceedings of the *IEEE Access Journal*, Vol. 9, pp. 66477-66485, April 2021.
- [J64] C. Kanellakis, S.S. Mansouri, E. Frek, D. Kominiak and **G. Nikolakopoulos**,” *Towards Visual Inspection of Wind Turbines: A Case of Visual Data Acquisition using Autonomous Aerial Robots*”, in the Proceedings of the *IEEE Access Journal*, Sept 2020.
- [J62] B. Lindqvist, S. S. Mansouri, A. Agha-mohammadi and **G. Nikolakopoulos**, “*Nonlinear MPC for Collision Avoidance and Control of UAVs with Dynamic Obstacles*”, in proceedings of the *IEEE Robotics and Automation Letters (RA-L)*, July, 2020.
- [J61] S. S. Mansouri, C. Kanellakis, B. Lindqvist, F.P. Anaraki, A. A. Mohammadi. J. Burdick and **G. Nikolakopoulos**, “*A Unified NMPC scheme for MAVs Navigation with 3D Collision Avoidance under Position Uncertainty*”, in proceedings of the *IEEE Robotics and Automation Letters (RA-L)*, July, 2020.
- [J60] C. Kanellakis, S. S. Mansouri, M. Castano, P. Karvellis, D. Kominial and **G. Nikolakopoulos**, “*Where to look: A collection of methods for MAV heading correction in underground tunnels*”, at the proceedings of *IET Image Processing Journal*, IET, 2020.
- [J59] P. Karvellis, G. Georgoulas and **G. Nikolakopoulos**, “*An exploratory approach to fetal heart rate-pH based systems*” in the *Signal, Image and Video Processing Journal*, Springer 2020.
- [J58] C. Kanellakis, S. Mansouri, D. Kominiak and **G. Nikolakopoulos**, ”*Deploying MAVs for Autonomous Navigation in Dark Underground Mine Environments*”, in the *Journal of Robotics and Autonomous Systems*, Vol. 126, No. 103472, Elsevier, April, 2020.
- [J57] A. Koval, S. S. Mansouri and **G. Nikolakopoulos**, “*Multi-agent collaborative path planning based on staying active policy*”, in proceedings of the *Robotics Journal*, MDPI, November 2020, doi:10.3390/robotics9040101

- [J56] Nick Eleftheroglou, Sina Sharif Mansouri, Theodoros Loutas, Petros Karvelis, George Georgoulas, **G. Nikolakopoulos** and Dimitrios Zarouchas, “*Intelligent data-driven prognostic methodologies for the real-time remaining useful life until the end-of-discharge estimation of the Lithium-Polymer batteries of unmanned aerial vehicles with uncertainty quantification*”, accepted for publication in the Journal of Applied Energy, Elsevier, 2019.
- [J55] C. Kanellakis and **G. Nikolakopoulos**, “*Guidance for autonomous aerial manipulator using stereo vision*” in the proceedings of the Journal of Intelligent and Robotic Systems, Springer 2019.
- [J54] U. Röijezon, M. Prellwitz, D. I. Ahlmark, J. Deventer, **G. Nikolakopoulos** and K. Hyypä, “*A Haptic Navigation Aid for Individuals with Visual Impairments: Indoor and Outdoor Feasibility Evaluations of the Laser Navigator*”, accepted for publication in the Journal of Visual Impairment and Blindness, April, 2019. <https://doi.org/10.1177/0145482X19842491>
- [J53] H.W. Wopereis, L. W. van de Ridder, T.J.W. Lankhorst, L. Klooster, E. Bukai, D. Wuthier, S. Stramigioli, J.B.C. Engelen, **G. Nikolakopoulos**, and M. Fumagalli, “*Multi-Modal Aerial Locomotion: An approach to active tool handling*”, Robotics and Automation Magazine, 2019.
- [J52] G. Andrikopoulos, and **G. Nikolakopoulos**, “*Vortex Actuation via Electric Ducted Fans: An Experimental Study*”, Journal of Robotic and Intelligent Systems, Springer, 2018.
- [J51] D. Ahlmark, M. Prellwitz, U. Röijezon, **G. Nikolakopoulos**, J. Deventer and K. Hyypä, “*A Haptic Navigation Aid for Individuals with Visual Impairments: Indoor and Outdoor Feasibility Evaluations of The Laser navigator*”, accepted in the Journal of Visual Impairment Blindness, 2018.
- [J50] S. S. Mansouri, C. Kanellakis, G. Georgoulas, D. Kominiak, T. Gustafsson and **G. Nikolakopoulos**, “*2D visual area coverage and path planning coupled with camera footprints*”, Control Engineering Practice, Elsevier, 2018.
- [J49] S. S. Mansouri, C. Kanellakis, E. Fresk, D. Kominiak and **G. Nikolakopoulos**, “*Cooperative Coverage Path Planning for Visual Inspection*”, Control Engineering Practice, Elsevier, 2018.
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- [C62] E. Kelasidi, **G. Andrikopoulos**, G. Nikolakopoulos and S. Manesis, “*A Survey on Modeling Pneumatic Muscle Actuators*”, in Proceedings of the 20th Conference on Industrial Electronics, Gdansk, Poland, 2011.
- [C61] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Trajectory Tracking Model Predictive Control for an Unmanned Quadrotor Helicopter*”, in Proceedings of the 20th Conference on Industrial Electronics, Gdansk, Poland, 2011.

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- [C59] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Experimental Application of a Model Predictive Controller for an Autonomous Quadrotor Helicopter*”, in the Proceedings of the 2nd Hellenic Robotic Conference (HEROC’2010).
- [C58] C. Papachristos, K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Modeling and Control of an Unmanned Tilt-Rotor air vehicle in a helicopter flying configuration*”, in the Proceedings of the 2nd Hellenic Robotic Conference (HEROC’2010).
- [C57] **G. Nikolakopoulos**, K. Alexis, I. Arvanitakis and A. Tzes, ‘*A Collaborative Unmanned Helicopter Control Strategy for Image Compression and Wireless Transmission*’ In Proceedings of the 18th IEEE Mediterranean Conference on Control and Automation, pp. 1206-1211, June 23-25, Marrakech, Morocco.
- [C56] K. Alexis, **G. Nikolakopoulos**, and A. Tzes, ‘*Experimental Model Predictive Attitude Tracking Control of a Quadrotor Helicopter subject to Wind-Gusts*’ In Proceedings of the 18th IEEE Mediterranean Conference on Control and Automation, pp. 1461-1466, June 23-25, Marrakech, Morocco.
- [C55] **G. Nikolakopoulos**, N. Roussos and K. Alexis, “*A Constrained Finite Time Optimal Controller for the Diving and Steering Problem of an Autonomous Underwater Vehicle*”, in Proceedings of the 7th International Conference on Informatics in Control, Automation and Robotics, pp. 260-267, 15-18 June, 2010, Funchal, Madeira, Portugal.
- [C54] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Model Predictive Control for a Miniature Coaxial Helicopter*”, in Proceedings of the 7th IFAC Symposium on Intelligent Autonomous Vehicles, September 6-8, 2010, Lecce, Italy.
- [C53] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Model Predictive Attitude Control of an Unmanned Quadrotor Helicopter subject to atmospheric disturbances*”, in Proceedings of the IEEE International Symposium on Industrial Electronics (ISIE’10), Bari, Italy, 4-7 July, 2010.
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- [C51] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Constrained Optimal Attitude Control of a Quadrotor Helicopter subject to Wind-Gusts: Experimental Studies*”, in Proceedings of the IEEE American Control Conference (ACC’10), No. ThC15.5, pp. 4451-4455, Baltimore, Maryland, June 30 – July 2, 2010
- [C50] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “*Design and Experimental Verification of a Constrained Finite Time Optimal Control Scheme for the Attitude Control of a Quadrotor Helicopter Subject to Wind Gusts*”, in Proceedings of the IEEE International Conference on Robotics and Automation (ICRA’10), pp.1636-1641, Anchorage, Alaska, May 3-8, 2010.
- [C49] **G. Nikolakopoulos** and N. Fanakis, “*A Reconfigurable Transmission Scheme for Lossy Image Transmission*”, in the 2nd International Congress on Image and Signal Processing (CISP’09), 17-19 October, Tianjin, China, 2009.
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- [C47] L. Dritsas, A. Tzes and **G. Nikolakopoulos**, “*Robust Stability Analysis of Networked Systems with Varying Delays*” in the proceedings of the European Control Conference, Budapest, Hungary, 23-26 August, 2009.

- [C46] **G. Nikolakopoulos**, A. Tzes and I. Kovaivos “*Reconfigurable Internal Model Control Based on Adaptive IIR Lattice Filters*”, in the Proceeding of 16th Mediterranean Conference on Control and Automation, pp. 1314-1319, Ajaccio, Corsica, France, June 25-27, 2008.
- [C45] **G. Nikolakopoulos** and N. Roussos, “*Constrained Finite Time Optimal Controller for the Depth Plane Motion of an Autonomous Underwater Vehicle*”, in the proceedings of IASTED Modelling, Identification, and Control (MIC 2007) conference, Innsbruck, Austria — February 12 – 14, 2007
- [C44] L. Dritsas, **G. Nikolakopoulos**, and A. Tzes, “*Constrained Optimal Control for a Special Class of Networked Systems*”, In Proceedings of the 2007 American Control Conference, pp. 1009-1014, July 11-13, 2007, New York, NY, U.S.A.
- [C43] **G. Nikolakopoulos** and N. Roussos, “*Optimal Depth Controller for an Autonomous Underwater Vehicle under constraints and uncertainties*”, in the proceedings of the European Control Conference (ECC'07), Kos, Greece, July 2007
- [C42] L. Dritsas, **G. Nikolakopoulos** and A. Tzes, “*On the Modeling of Networked Controlled Systems*”, In Proceedings of the 15th Mediterranean Conference on Control & Automation, Session FrM-1, article T09-004, June 27-29, Athens, Greece.
- [C41] K. Hrissagis, **G. Nikolakopoulos**, P. Karlsson and V. Spais, “*The C@R Project: Rural Living Labs for the Collaborative Creation of Services – Enhancing Rural Development by People Working and Living in Rural Areas*”, in the proceedings of the Ruralearn International Conference, Chios, Greece, June 24-27, 2007.
- [C40] M. Vagia, **George Nikolakopoulos** and Anthony Tzes “*An \mathcal{H}_∞ -Control Scheme for an Electrostatic micro-Actuator with Structured Uncertainty*”. In the Proceedings of the IEEE Multi Conference on Systems and Control (CCA~2007 and SIC~2007), Singapore, Paper MoA04.5 October 2007.
- [C39] M. Vagia, Y. Koveos, **G. Nikolakopoulos** and A. Tzes, “*Robust PID Control for a Micro-Actuator with Structural Uncertainty*”, In Proceedings of the 14th Mediterranean Conference on Control and Automation (MED'06), Paper #90, June 28-30, Ancona, Italy.
- [C38] **G. Nikolakopoulos**, L. Dritsas, A. Tzes and J. Lygeros, “*Adaptive Constrained Control of Uncertain ARMA-Systems based on Set-Membership Identification*”, In Proceedings of the 14th IEEE Mediterranean Conference on Control and Automation (MED'06), Paper# 66, June 28-30, Ancona, Italy.
- [C37] A. Panousopoulou, **G. Nikolakopoulos**, A. Tzes and J. Lygeros, “*Experimental Evaluation of a Mobile Ad-Hoc Networked (MANET) Controlled System*”, In Proceedings of the 17th International Symposium on Mathematical Theory of Networks and Systems (MTNS'06), Paper FrA09.1-495, pp. 2425-2430, July 24-28, 2006, Kyoto, Japan.
- [C36] L. Dritsas, A. Tzes and **G. Nikolakopoulos**, “*Constrained Finite Time Control of Networked Systems with Uncertain Delays*”, In Proceedings of the 14th Mediterranean Conference on Control and Automation (MED'06), Paper #135, June 28-30, Ancona, Italy.
- [C35] L. Dritsas, **G. Nikolakopoulos**, and A. Tzes, “*Constrained Finite Time Optimal Control of a Micro Capacitor*”, Paper PD-3751, In Proceedings of IEEE Industrial Electronics Conference (IECON'06), November 7-10, Paris, France
- [C34] L. Dritsas, **G. Nikolakopoulos**, and A. Tzes, “*Constrained Optimal Control over Networks with Uncertain Delays*”, In Proceedings of the 45th IEEE Conference on Decision and Control, Paper FrA11.4/1384, pp. 4993-8, December 13-15, San Diego, CA, U.S.A
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- [C33] Y. Stergiopoulos, S. Manesis, A. Tzes and **G. Nikolakopoulos**, “*Control via Input Shaping of a Pneumatic Crane System*”, In Proceedings of the 2005 American Control Conference, pp. 545-550, Portland, OR, USA, June 2005

- [C32] **G. Nikolakopoulos**, and A. Tzes, “*l-step Ahead Optimal Robust Controller for Uncertain Auto-Regressive Systems*”, In Proceedings of the 13th Mediterranean Conference on Control and Automation (2005 ISIC-MED), Paper # 252, pp. 1476-1480, June 27-30, Limassol, Cyprus
- [C31] A. Tzes, **G. Nikolakopoulos**, and L. Dritsas “*Design and Sensitivity Analysis of Constrained Finite Time Optimal Controller for a Micro-Actuator*”, In Proceedings of the 13th Mediterranean Conference on Control and Automation (2005 ISIC-MED), Paper # 191, pp.958-963, June 27-30, Limassol, Cyprus
- [C30] A. Panousopoulou, **G. Nikolakopoulos**, and A. Tzes, “*Recent Trends on QoS for Wireless Networked Controlled Systems*”, In Proceedings of the 2nd International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2005), Paper I359RH, July 14-17, Orlando, USA
- [C29] **G. Nikolakopoulos**, A. Panousopoulou, A.Tzes and J. Lygeros, “*Multi-hopping Induced Gain Scheduling for Wireless Networked Controlled Systems*”, In Proceedings of the 44th IEEE Conference on Decision and Control and the European Control Conference 2005, Paper MoA14.3, pp. 470-475, December 13-15, Seville, Spain.
- [C28] M. Vagia, **G. Nikolakopoulos**, and A. Tzes, “*Intelligent Robust Controller Design for a Micro-Actuator*”, In Proceedings of the 44th IEEE Conference on Decision and Control and the European Control Conference 2005, Paper MoB15.6, pp. 1191-1196, December 13-15, Seville, Spain
- [C27] **G. Nikolakopoulos**, A. Panousopoulou and A. Tzes, “*MANET-Issues and their Effects on Control Applications*”, In Proceedings of the 10th IEEE Conference on Emerging Technologies and Factory Automation (ETFA 2005), pp. 369-376, Sep. 2005, Catania, Italy.
- [C26] M. Vagia, **G. Nikolakopoulos** and A. Tzes, “*Intelligent Robust-Switching PID Controller Design for a Micro-Actuator*”, In Proceedings of the 5th International Conference on Technology and Automation (IEEE-ICTA’05), pp. 102-107, October 2005, Thessaloniki, Greece.
- [C25] E. Kolyvas, Y. Koveos, **G. Nikolakopoulos** and A. Tzes, “*Modeling and Robust PID-Control of a Shape Memory Alloy Actuated Haptic Finger*”, In Proceedings of the 5th International Conference on Technology and Automation (IEEE-ICTA’05), pp. 179-184, October 2005, Thessaloniki, Greece
- [C24] A.Tzes, **G. Nikolakopoulos**, L.Dritsas and Y.Koveos “*Multi-Parametric H_{∞} Control of a Micro Actuator*”, In Proceedings of the 16th IFAC World Congress, Paper # 4455, July 4-8, 2005, Prague, Czech Republic.
- [C23] A. Tzes and **G. Nikolakopoulos**, “*LQR-output feedback gain scheduling of mobile networked controlled systems*”, In Proceedings of the 2004 American Control Conference, Paper #FrA17.6, pp. 4325-4329, June 30-July 2, 2003, Boston, MA, USA.
- [C22] A. Panousopoulou, **G. Nikolakopoulos**, and A. Tzes, “*Experimental Optimization of a Wireless (802.11b) Transmission Scheme for Real-Time Remote Control Applications*”, In Proceedings of the 12th Mediterranean Conference on Control and Automation (MED2004), Paper #1204, June 6-9, Kusadasi, Izmir, Turkey.
- [C21] **G. Nikolakopoulos** and A. Tzes, “*An Adaptive Reconfigurable Lattice Identification Scheme for IIR Systems*”, In Proceedings of the 12th Mediterranean Conference on Control and Automation (MED2004), Paper #1199, June 6-9, Kusadasi, Izmir, Turkey.
- [C20] **G. Nikolakopoulos**, A. Tzes and N. Panousopoulou, “*Adaptive Gain Scheduling for Congested Wi-Fi(802.b) Networked Controlled Systems*”, in the proceedings of 5th IFAC Workshop on Time-Delay Systems, September 8-10, 2004, Katholieke University Leuven, Belgium
- [C19] **G. Nikolakopoulos**, Y.Koveos, and A.Tzes, “*Transfer Function Identification of a Single Flexible Link via Adaptive Lattice Filters*”, In Proceedings of 2004 IEEE International Conference on Industrial Technology, Paper #1797, pp. 1468-1473, December 8-10, Hammamet, Tunisia.
- [C18] A. Panousopoulou, **G. Nikolakopoulos**, A. Tzes, “*Experimental Controller Tuning and QoS Optimization of a Wireless Transmission Scheme for Real-Time Remote Control Applications*”, In Proceedings of 2004 IEEE

- International Conference on Industrial Technology, Paper #1719, pp. 801-806, December 8-10, Hammamet, Tunisia.
- [C17] E. Kolyvas, **G. Nikolakopoulos**, Y. Koveos, and A. Tzes, “*Experimental Design, Development and Visual-Servoing of a Shape Memory Alloy Actuated Finger*”, In Proceedings of 2004 IEEE International Conference on Industrial Technology, Paper #1708, pp. 1448-1452, December 8-10, Hammamet, Tunisia.
- [C16] J. Petropoulos, S. Manesis, A.Tzes, and **G. Nikolakopoulos**, “*Position and Swing Control of a Pneumatic Pendulum System*”, In Proceedings of 2004 IEEE International Conference on Industrial Technology, Paper #662, pp. 1307- 1312, December 8-10, Hammamet, Tunisia.2003.
- [C15] **G. Nikolakopoulos** and A.Tzes, “*Lattice l-step Ahead Output Uncertainty Predictor for Auto-Regressive Systems*”, Paper #121, In Proceedings of the 11th Mediterranean Conference on Control and Automation, MED2003, June 17-20, 2003, Rhodes, Greece.
- [C14] **G. Nikolakopoulos**, M.Koundourakis and A.Tzes, “*An Integrated System based on WEB and/or WAP Framework for Remote Monitoring and Control of Industrial Processes*”, In Proceedings of the IEEE International Symposium on Virtual Environments, Human-Computer Interfaces, and Measurement Systems VECIMS 2003, Paper # 3017, pp. 201-206, July 27-29, 2003, Lugano, Switzerland.
- [C13] **G. Nikolakopoulos**, «*OPTINAV (Optimum Navigation Decision Support System)*”, In Proceedings of National Instruments Hellas 2003 Conference, Athens, Greece.
- [C12] A.Tzes, **G.Nikolakopoulos** and I.Koutroulis, “*Development and Experimental verification of a Mobile Client-Centric Networked Controlled System*”, Paper #227, In Proceedings of the 2003 European Control Conference, Cambridge, UK, September 1-7, 2003 (this article received the IST-ECC03 prize award)
- [C11] **G. Nikolakopoulos**, A. Tzes, “*Adaptive Inverse-Lattice Learning Control*”, In Proceedings of the 15th IFAC World Congress on Automatic Control, Paper #2624, Barcelona, Spain, July 2002
- [C10] G. Georgoulas, **G. Nikolakopoulos**, Y. Koutroulis, A. Tzes & P. Groumpos, “*An Intelligent Visual Based System for Object Inspection and Welding, relying on Active Contour Model-Algorithms*”, in Proceedings of the 2nd Hellenic Conference on Artificial Intelligence, Thessaloniki, Greece, pp. 399-409, 2002
- [C9] **G. Nikolakopoulos**, M. Koundourakis, A. Tzes and G. Georgoulas, “*Use of the Simulation Interface Toolkit for the Simulation and Experimentation of Automatic Control Systems*”, In Proceedings of National Instruments Hellas 2003 Conference, Athens, Greece.
- [C8] **G. Nikolakopoulos**, “*OPTINAV System Integration within the XML framework*”, In Proceedings of 3rd SWAN Workshop, Paris, April 2002.
- [C7] **G. Nikolakopoulos**, “*Fuzzy Control of an Active Magnetic Bearing*”, Technical Choice (Texniki Eklog in Greek), Year 2001, July 2001
- [C6] **G. Nikolakopoulos**, R. E. King, “*Intelligent Control of a Suspended Flywheel*”, European Workshop on Intelligent Forecasting, Diagnosis and Control, June 24-28, 2001, Santorini, Greece.
- [C5] **G. Nikolakopoulos**, A. Tzes, “*Reconfigurable Adaptive Control Based on Lattice Filtering*”, European Workshop on Intelligent Forecasting, Diagnosis and Control, June 24-28, 2001, Santorini, Greece.
- [C4] **G. Nikolakopoulos**, M. Koundourakis, A. Tzes & Y. Koutroulis, “*An integrated system based on the WEB and/or WAP framework for Remote Control of Industrial Processes*”, In Proceedings of National Instruments Hellas 2001 Conference, Athens, Greece.
- [C3] **G. Nikolakopoulos** “*Fuzzy Control of an Active Magnetic Bearing*”, 3rd National (Greek) Conference of Automation and Robotics 2000.
- [C2] **G. Nikolakopoulos**, “*Fuzzy Control of an Active Magnetic Bearing*”, Power Transmission (Metadosi Isxios in Greek) Sixth Year, December 2000, No 62.

- [C1] **G. N. Nikolakopoulos**, A. Tzes, “A Web-Based Integrated Framework for Adaptive Control of Industrial Processes”, In Proceedings of National Instruments Hellas 2000 Conference, Athens, Greece.

3.6 Special Sessions, Tutorials, Workshops

- [T12] C. A. Miguel, P. Sopasakis, **G. Nikolakopoulos**, G. Georgouas and A. Bemporad, “Data-Driven integrated process control in Industry 4.0”, 25th Mediterranean Conference on Control and Automation, 3-6 July, 2017, Valletta, Malta.
- [T11] **G. Nikolakopoulos** and G. Georgoulas, “Fault Detection and diagnosis, failure prognosis and fault mitigation methods in industrial applications”, in proceedings of the 20th World Congress of the International Federation of Automatic Control (IFAC), Toulouse, France, 9-14, July, 2017.
- [T10] **G. Nikolakopoulos**, and D. Farina, “Multidisciplinary in Robotic Exoskeleton Technology”, European Robotics Forum, Edinburgh, Scotland, UK, March 22-24, 2017.
- [T9] A. Ollero, E. Ziwkerad and **G. Nikolakopoulos**, “Aerial Robotics Inspection: from prototypes to industrial applications”, European Robotics Forum, Edinburgh, Scotland, UK, March 22-24, 2017.
- [T8] G. Nikolakopoulos, “Towards the Aerial Robotic Worker - AEROWORKS”, special session in the International Conference on Intelligent Robots and Systems (IROS 2016), October 9-14, Daejeon, Korea, 2016.
- [T7] K. Alexis, M. Chli, L. Carrillo, **G. Nikolakopoulos**, P. Oettershagen, P. Oh and C. Papachristos, "Robust Autonomy for Aerial Robotics" at the 12th International Symposium on Visual Computing, at Las Vegas, Nevada in December 12-14, 2016.
- [T6] M. Fumagalli, **G. Nikolakopoulos** and S. Stramigioli, “On Aerial Manipulators: Design and Control”, 24th Mediterranean Conference on Control and Automation, June 21-24, Athens, Greece, 2016.
- [T5] G. Georgoulas, M. Bembouzid and **G. Nikolakopoulos**, “Fault Detection, Fault Diagnosis and Fault Tolerant Control in Real World electromechanical Applications” 24th Mediterranean Conference on Control and Automation, June 21-24, Athens, Greece, 2016
- [T4] **G. Nikolakopoulos**, T. Gustafsson and P.E. Martinsson, “Special Session on Robotics in Mining”, at the 4th IFAC Conference on Mining, Mineral and Metal Processing, 25-27 August, Oulu, Finland 2015.
- [T3] **G. Nikolakopoulos** and G. Georgoulas, “Special Session on Fault Diagnosis Methods in Electric Drives”, IEEE International Conference on Industrial Technology (ICIT 2015), Seville, Spain, March 17-19, 2015.
- [T2] K. Alexis, **G. Nikolakopoulos** and A. Tzes, “Constrained Finite Time Optimal Controllers for Helicopters subject to Wind-Gusts Disturbances”, in the 17th Mediterranean Conference on Control and Automation, June 24-26, Thessaloniki, Greece, 2009.
- [T1] E. Kolyvas, **G. Nikolakopoulos**, A. Panousopoulou, A. Tzes, and J. Lygeros, ”Architectures for Networked Automation: Analysis, Design and Implementation”, in IEEE International Conference on Robotics and Automation (ICRA’06), Orlando, Florida, May 15-19, 2006.

3.7 Keynotes

- [K6] **G. Nikolakopoulos**, “AI enabled autonomy for empowering the next generation of robotized mining inspections”, Plenary Talk on the Digital Mining 2022 Congress, Friday 12th of August, Chile.
- [K5] **G. Nikolakopoulos**, “Autonomy as an enabler for the Next Generation of Space Robotics Exploration Missions”, Plenary Talk on the 22nd IEEE International Conference on Autonomous Robot Systems and Competitions, Santa Maria da Feira, Portugal, April 29-30, 2022.
- [K4] **G. Nikolakopoulos**, “AI in Mining, Hype or Hope”, SIP-STRIM meeting on Mining and AI, Luleå, Sweden, Nov 7, 2019.
- [K3] **G. Nikolakopoulos**, ”Robotics and AI”, Vätenskapsenshus, 10th of June 2019.
- [K2] **G. Nikolakopoulos**, “AI – Digital Innovation Hub”, Vätenskapsenshus, 9 of May 2019.

[K1] G. Nikolakopoulos, "Robotic Invention", Vätenskapenshus, 17 of February 2017.

3.8 Invited Talks - Presentations

- [P22] G. Nikolakopoulos, "The Future is Now, ", Big Science Sweden, 24th November, 2020. (remote event)
- [P21] G. Nikolakopoulos, "*The future of Data Science in Sweden*", Panel participation, 8th Swedish Workshop on Data Science, October 23, 2020, Luleå, Sweden.
- [P20] G. Nikolakopoulos "*Why to coordinate an EU proposal*", Panel Participation, Horizon Europe Days, Luleå University of Technology, Luleå, Sweden.
- [P19] G. Nikolakopoulos, "Aerial Robotics", at the Space Collaboration event between Luleå University and Swedish Space Cooperation, Esrange, October 2-3, 2019.
- [P18] G. Nikolakopoulos and E. Fresk, "*AEROWORKS: Aerial Robotic Worker*", European Robotics Forum, Edinburgh, Scotland, UK, March 22-24, 2017.
- [P17] G. Nikolakopoulos, D. Kominiak, and T. Gustafsson, "Towards Real Life Autonomous UGVs for Search and Rescue", European Robotic Forum 2016, Ljubljana, Slovenia.
- [P16] E. Fresk, K. Ödmark and G. Nikolakopoulos, "UWB as an enabling technology for Robotics in Mining", European Robotic Forum 2016, Ljubljana, Slovenia.
- [P15] M. Fumagalli, G. Nikolakopoulos, "AEROWORKS: Towards Collaborative Aerial Inspection and Maintenance", European Robotic Forum 2016, Ljubljana, Slovenia.
- [P14] G. Nikolakopoulos, G. Andrikopoulos and S. Manesis, "*Pneumatic Artificial Muscles in Biomimetic and Medical Engineering: A quick Overview*", presentation at the 2013 Workshop on Motor Control, Luleå University of Technology, Luleå, Sweden.
- [P13] G. Nikolakopoulos, U. Andersson, P.E. Martinsson and T. Gustafsson, "*Mine Patrolling Rovers*", poster at the 2012 Automation Days, Globe Arena, Stockholm, Sweden.
- [P12] A. Tzes & G. Nikolakopoulos, "*Industrial Control*", Western Greece technology Platform Conference, Turning Research to Innovation Conference, 17 October, 2008.
- [P11] B. Spais, G. Nikolakopoulos, "*Robotics and Industrial Control Systems*" Regional Innovation Pole of Western Greece Workshop, Conference Center, University of Patras, 22-25 September, 2008.
- [P10] G. Nikolakopoulos. "*Time Delays and Their Effects in Networked Controlled Systems*" in the DIANOHEMA project Workshop, March 7, 2008.
- [P9] G. Nikolakopoulos, "*Pneumatic Muscle Actuators: Modeling, Control and Applications*", Room A109, Luleå University of Technology, 5th of June, 2013.
- [P8] G. Nikolakopoulos, "How we think and act about scientific publication" workshop, Luleå University of Technology, Room C305, 19th of March, 2013.
- [P7] G. Nikolakopoulos, "Quadrotors and Robotics", Vision for Business meeting INTERREG IVA, Kulturen Hus, Luleå, Sweden, 20 Feb, 2013.
- [P6] G. Nikolakopoulos, "*Overview of Ongoing Projects and Future Research Directions in the Control Systems Group@LTU*", KTH Royal Institute of Technology, Stockholm, Sweden, 27 Jan, 2012.
- [P5] G. Nikolakopoulos, "*Attitude Stabilization of a Quadrotor over Wireless Mesh Networks*", Intelligent Systems Lab, School of Information Science, Computer and Electrical Engineering, Halmstad University, Sweden, 8 Jan, 2011.
- [P4] G. Nikolakopoulos, "*Switched Output Feedback Control for Networked Systems*", ETH Zurich, Physikstr. 3, ETL K25, 26 Oct, 2006
- [P3] A. Tzes and G. Nikolakopoulos, "*Teaching the Science of Robotics in the Secondary Educational System– Experiences from other Educational institutes and Adaptation to the Greek Reality*", in

the workshop Teaching Systems Automation in the Technical Chamber of Greece, TEE, 19-21 March, 2004.

- [P2] A. Tzes, G. Nikolakopoulos, «*Modern Technological Systems for Treating Patients on Emergency Events*», Achaia Surgery Days Workshop, 2003.
- [P1] G. Nikolakopoulos & R.E.King, “*Fuzzy Thrusters for a Suspended Flywheel*”, IEEE Control Systems Society – GR, workshop on Industrial Automation and Industrial computer science, November, 2002, Xalkida, Greece

3.9 Educational Articles

- [E1] S. Satpute and **G. Nikolakopoulos**, “*A Hybrid and Adaptable Research Master Program on Space Autonomy*”, Nätverk och Utveckling, NU 2022, Stocholm, June 15-17, 2022.
- [E2] A. Banerjee and **G. Nikolakopoulos**, “*Facilitating a hybrid virtual robotics course in Student centered learning environment*”, Nätverk och Utveckling, NU 2022, Stocholm, June 15-17, 2022.

3.10 Popular Science

- [P12] A. Banarjee and **G. Nikolakopoulos**, “*Facilitating a Hybrid Virtual Robotics Course in Student Centered Learning Environment*”, in the NU2022 conference on education, Stockholm, 15-17 June, 2022.
- [P11] S. Satpute and **G. Nikolakopoulos**, “*Hybrid and Adaptable Research Master Program on Space Autonomy*”, in the NU2022 conference on education, Stockholm, 15-17 June, 2022.
- [P10] "Drones Maps Mines to explore unsafe caverns and seek out minerals", Article in New Scientist, April 2017, <https://www.newscientist.com/article/2127123-drone-maps-mines-to-explore-unsafe-caverns-and-seek-out-minerals>
- [P9] "Drones to inspect mines", Article in Nyteknik, April, 2017, <http://www.nyteknik.se/fordon/dronare-ska-inspektera-gruvor-6842019>
- [P8] "Fladdermusrobot kan göra stora insatser", <http://www.svt.se/nyheter/vetenskap/fladdermusrobot-kan-gora-stora-insatser>, Swedish National News on Research, SVT research, Feb. 2017.
- [P7] "Robots will provide better safety", <http://www.ltu.se/research/subjects/control/Nyheter-Aktuellt/Robotar-ska-ge-bättre-flygsakerhet-1.144206>
- [P6] "Visionen: Inga Mäniskor i gruvan", Ny Teknik, 9th September 2015, No. 37 (Link to the article) <http://www.nyteknik.se/tekniknyheter/article3932985.ece>
- [P5] "Forskarmix med fokus på Rörelse", LTU Review, No. 3, 2014. (Link to the article)
- [P4] New Labor with Flying Robots, LTU News (Online Link)
- [P3] 4.8 milion for collaborative projects, LTU News (Online Link)
- [P2] Newly formed robotic club enter competition, LTU News (Online Link)
- [P1] Intelligent Pellets in new project, LTU News (*Online Link*)

4. Granted Funding

I have participated in the writing (full or partial) of the following successful (funded) research proposals in the European Union, the Swedish and the Greek ministry of Research. The presented budget concerns only the amount of the Grant for the Institute/Company that I had my affiliation.

Project Name	Institute/Company	Budget	My Role
G-DRONES	VINNOVA	4M SEK	PI
NEXGEN-SIMS	European Commission Horizon 2020	1.7M Euros	PI
DRONESAFE	VINNOVA	1M SEK	PI
AERO-TRAIN	European Commission Horizon 2020	560K Euros	PI
Illumination	European Commission Horizon 2020	500K Euros	PI
EDIS – Towards the vision of electrified flying	Traficverket	400K SEK	PI
Aplied AI DIH	Till Växt Verket	30M SEK	PI
ROBOSOL	Interreg Nord	0,8M Euros	PI
Aplied AI 6 Post Docs	Kempe Stiftelsernas	4.2M SEK	PI
SIMS H2020-Greening the Economy	European Commission - 2017	17M Euros	Proposal Writer, WP5- Robotics Coordinator
Complnnova H2020 – FETopen	European Commission - 2015	5,5M Euros	Significant writing Contribution, PI (Coordinator)
AEROWORKS H2020 – ICT Robotics	European Commission - 2014	5,6M Euros	Full Proposal Writer (Coordinator)
DISIRE H2020 – SPIRE Integrated Process Control	European Commission = 2014	6M Euros	Full Proposal Writer
New understanding of Motor Control and Fails by Novel Postural Sway Analysis, Robotics and Mathematical Modeling Vetenskapsrådet	Swedish Research Council - 2014	4,9M SEK	PI, Significant Proposal Writer

(Swedish Research Council)			
Humanoid Robot for Studying Balancing Control	Carl Kempe	1M SEK	Proposal Writer
Support for coordination of large proposals	LTU Grants Office	100K SEK	Coordinator
Localization for Autonomous UAV systems in Underground Mining	VINNOVA	500K SEK	PI, Significant Proposal Writer
Industrial Post Doc from PIIA (Process Industrial IT and Automation)	VINNOVA-PIIA	1M SEK	PI, Proposal Writer
Motor Control and Biomechanics Labs	LTU Labfond-2015	1,2M SEK	Significant Proposal Writer (Coordinator)
Pneumatic Muscle Dancer Stage II	LTU-2014	250K SEK	Full Proposal Writer
An Integrated E-Health System for Supporting a Web based Motion Analysis	LTU – 2014	200K SEK	(Coordinator) Full Proposal Writer
Pneumatic Muscle Dancer Stage I and II	LTU-2014	300K SEK	(Coordinator) Full Proposal Writer
R5-COP	ARTEMIS EU - 2014	282.740€	PI, Significant Proposal Writer in Field Robotics
3D Localization Cameras for Field Robotics Lab	Kempe – 2013	1M SEK	Full Proposal Writer
3D Localization Cameras for Field Robotics Lab	Labfond - 2013	1.1M SEK	Full Proposal Writer
Support for Coordinating Large EU proposals	LTU Grants Office - 2012	300K SEK	Full Proposal Writer
Mine Patrolling Rovers	HLRC - 2012	200KSEK	Coordinator Full Proposal Writer
EQoRef	SCOPE-2012	2MSEK	PI, Significant Proposal Writer
FLEXA	R&D ZENON S.A	364.800€	PI, Significant Proposal Writer
NANOMA	R&D ZENON S.A.	650.580€	PI, Significant Proposal Writer

SYMBIOSIS-EU	R&D ZENON S.A.	378.310€	PI, Significant Proposal Writer
PROMOVEO	R&D ZENON S.A.	186.000€	PI, Significant Proposal Writer
CONFIDENCE	R&D ZENON S.A.	272.470€	PI, Significant Proposal Writer
ESA - MANET Intercommunication for Robotic Applications for Lunar Exploration (MIRACLE)	Department of Electrical and Computer Engineering University of Patras, Greece	40.000€	PI, Significant Proposal Writer
PENED 2003– «Design and Development of an Integrated Wireless Adaptive Remote Control System with emphasis in the Optimization of the Provided Quality of Services»	Department of Electrical and Computer Engineering University of Patras, Greece	27.350€	PI, Full Proposal Writer
Kathodigos, General Secretariat of Research and Technology, 2010	Department of Electrical and Computer Engineering University of Patras, Greece	61.500€	PI, Significant Proposal Writer
Robotic Systems for Rescue Missions - Latsis Foundation 2011	Department of Electrical and Computer Engineering University of Patras, Greece	12.000€	PI, Significant Proposal Writer
Integrated Robotic Vehicle for Planetary Surface Exploration - 2011	Department of Electrical and Computer Engineering University of Patras, Greece	160.000€	PI, Significant Proposal Writer

5. Other Scientific Qualifications

5.1 Active participation in National and International Conferences

1. Member of the International Program Committee (IPC) for the IASTED International Conference, Modeling, Identification and Control (MIC 2008), Innsbruck, Austria, February 11-13, 2008
2. Member of the International Program Committee (IPC) for the IASTED International Conference, Modeling, Identification and Control (MIC 2009), Innsbruck, Austria, February 16-18, 2009
3. Member of the International Program Committee (IPC) for the IASTED International Conference, Modeling, Identification and Control (MIC 2009), Innsbruck, Austria, February 15-17, 2010

4. Member of the International Program Committee (IPC) for the IASTED International Conference, Modeling, Identification and Control (MIC 2011), Innsbruck, Austria, February 14-16, 2011
5. Member of the International Program Committee (IPC) for the 17th Mediterranean Conference on Control and Automation (MED'09), Thessaloniki, Greece, June 24-26, 2009.
6. Associate Editor - IEEE American Control Conference (ACC'09), St. Louis, Missouri, USA, June 10-12, 2009.
7. Member of the International Program Committee (IPC) – Sensors and Sensor Network Track, for the 6th IEEE Conference on Automation Science and Engineering (CASE2010), Toronto, Canada, August 21-24, 2010.
8. Member of the International Program Committee (IPC) for the “Computational Intelligence and Modern Heuristics in Automation Track” at the 15th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA'2010) at Bilbao, Spain, 13-17 September 2010.
9. Member of the International Program Committee (IPC) for the IASTED International Conference, Modeling, Identification and Control (MIC 2011), Innsbruck, Austria, February 14-16, 2011.
10. Member of the International Program Committee (IPC) for the IASTED International Conference, Modeling, Simulation and Identification (MSI 2011), Pittsburgh, USA, November 7-9, 2011.
11. Member of the International Program Committee (IPC) for the 2nd International Conference on Electric Information and Control Engineering (ICEICE 2012), April 6-8, Lushan, China, 2012.
12. Member of the Technical Program Committee (TPC) for the 3rd International Conference on Electrical and Control Engineering, Three Gorges, May 24-26, Hubei, China, 2013.
13. Member of the International Program Committee for the 31st IASTED Asian Conference on Modeling, Identification and Control (AsiaMIC 2012), Phuket, Thailand, April 2-4, 2012.
14. Associate Editor - IEEE American Control Conference (ACC'2012), June 27-29, Montreal, Canada, 2012.
15. Member of the International Program Committee for the 14th IASTED Conference on Control and Applications (CA 2012), June 18-20, Crete, Greece, 2012.
16. Associate Editor - IEEE American Control Conference (ACC'2013), June 17-19, Washington DC, USA, 2013.
17. Member of the International Program Committee for the 2013 International Conference on Control, Decision and Information Technologies (CoDIT'13), April 11-13, Hammamet, Tunisia.
18. Member of the International Program Committee for the 32nd IASTED International Conference on Modeling, Identification and Control (MIC 2013), February 11-13, Innsbruck, Austria, 2013.
19. Member of the International Program Committee for the Modeling, Identification and Control (AsiaMIC 2013), Phuket, Thailand, April 10-12, 2013.
20. Member of the International Program Committee (IPC) for the 21th Mediterranean Conference on Control and Automation (MED'13), Chania, Greece, June 25-28, 2013.
21. Member of the International Program Committee (IPC) for the 15th IASTED International Conference on Control Applications, August 26-28, Honolulu, USA, 2013.
22. Member of the International Program Committee (IPC) for the IASTED Conference on Modeling, Identification and Control (MIC 2014), February 17-19, Innsbruck, Austria, 2014.

23. Associate Editor - IEEE American Control Conference (ACC'2014), June 4-6, Portland, Oregon, USA, 2014.
24. Member of the International Program Committee (IPC) for the 11th International Conference on Informatics in Control, Automation and Robotics - ICINCO 2014, Vienna, Austria, 2-4 September 2014.
25. Member of the International Program Committee for the 8th Hellenic Conference on Artificial Intelligence – SETN2014, Ioannina, May 15-17, 2014.
26. Member of the International Program Committee (IPC) for the 2nd International Conference on Control Decision and Information Technologies (CoDIT'14), November 3-5 Metz, France, 2014.
27. Member of the IPC for the IASTED International Conference on Modelling, Identification and Control (MIC 2015), Innsbruck, Austria, February 16-18, 2015.
28. Member of the IPC for the 12th International Conference on Informatics and Control, Automation and Robotics, ICINCO 2015, Colmar, Alsace, France, 21-23 July, 2015.
29. Associate Editor - IEEE American Control Conference (ACC'15), Chicago, USA, July 1-3, 2015.
30. Member of the IPC for the 4th IFAC Conference on Mining, Mineral and Metal Processing, 25-27 August, Oulu, Finland 2015.
31. Member of the IPC for the 4th International Conference on Control, Instrumentation and Automation (ICCIA2015), Azad University, Qazvin, Iran, January 27-28, 2016.
32. Member of the IPC for the 13th International Conference on Informatics in Control, Automation and Robotics, 29-31 July, Lisbon, Portugal, 2015.
33. Associate Editor - IEEE American Control Conference (ACC'16), Boston, MA, USA, July 6-8, 2016.
34. Member of the IPC for the 35th IASTED International Conference on Modelling, Identification and Control (MIC 2015), Innsbruck, Austria, February 15-17, 2016.
35. Member of the IPC for the 36th IASTED International Conference on Modelling, Identification and Control (MIC 2015), Innsbruck, Austria, February 20-22, 2017.
36. Associate Editor - IEEE American Control Conference (ACC'16), Boston, MA, USA, July 6-8, 2016.
37. Associate Editor - IEEE American Control Conference (ACC'17), Seattle, Washington, USA, July 6-8, 2016.
38. Program Vice Chair, IEEE MED 2016, Athens, Greece.
39. Member of the IPC for the 25th Mediterranean Conference on Control and Automation, 3-6 July, Valletta, Malta, 2017.
40. Associate Editor for the 13th Conference on Automation Science and Engineering, IEEE, RAS. August 20-23, Xian, China, 2017.
41. Member of the IPC for 13th IEEE International Conference on Automation Science and Engineering 2017 – CASE 2017
42. Member of the IPC for 13th IEEE International Conference on Automation Science and Engineering 2018 – CASE 2018
43. Associate Editor - IEEE American Control Conference (ACC'18)
44. Member of the IPC for the 26th Mediterranean Conference on Control and Automation, Croatia

45. Member of the IPC for the 27th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2018.
46. Member of the IPC for the RSS Pioneers 2018, June 25, 2018, Pittsburgh, PA, USA.
47. Member of the IPC for the 27th Mediterranean Conference on Control and Automation, 1-4 July, Akko, Israel, 2019.
48. Member of the IPC for the 6th International Conference on Control, Decision and Information Technologies, CODIT'2019, Paris, France, April 2019.
49. Associate Editor for the 2019 International Conference on Unmanned Aircraft Systems (ICUAS), June 11-14, 2019, Atlanta, GA, USA.
50. Member of the European's Commission AI Alliance.
51. Associate Editor - IEEE American Control Conference (ACC'20), Denver, USA, July 1-3, 2020.
52. Program Committee member for the 2019 IEEE International Conference on Robotics and Biomimetics (ROBIO 2019), Dali, Yunnan, China, December 6-8, 2019.
53. Associate Editor – IEEE American Control Conference (ACC'21), New Orleans, LA, USA, May 26-28, 2021.
54. Associate Editor – IEEE 17th International Conference on Automation Science and Engineering (CASE 2021), August 23-27, 2021, Lyon, France.
55. Invited and Special Session Chairs - IEEE International Conference on Unmanned Aircraft Systems (ICUAS 2021), June 15-18, Athens, Greece.
56. Member of the IPC for the 13th International Conference on Computer Vision Systems, September 22-24, 2021, Vienna, Austria.
57. Member of the IPC for the 1st Workshop on Aerial Robotic Systems Physically Interacting with the Environment (AIRPHARO), October 4-5, 2021, Biograd na Moru, Croatia.
58. Associate Editor – American Control Conference 2022, June 8-10, 2022, Atlanta, GA.
59. Program Committee member for the 30th Conference of Open Innovations Association – FRUCT, 2021, Oulu, Finland.
60. Program Vice Chair for the 30th Mediterranean Conference on Control and Automation, 2022, Athens, Greece.
61. Associate Editor for the 2022 International Conference on Unmanned Aerial Systems ICUAS22, June 21-24, 2022, Dubrovnik, Croatia.
62. Associate Editor for the 18th IEEE International Conference on Automation Science and Engineering, CASE 2022, August 20-24, Mexico City, Mexico, 2022.

5.2 Sessions Chair / Co-Chair

1. Co-Chair of the session “Emerging Control Applications (R)”, ACC2022, IEEE American Control Conference, June 8-10, Atlanta, USA.
2. Program Vice-Chair, 30th Mediterranean Conference on Control and Automation, MED 2022, June 28-July 1, 2022, Divani Apollon Palace, Greece.
3. Associate Editor, International Conference on unmanned Aircraft Systems, ICUAS 2022, June 21-24, Dubrovnik, Croatia.

4. Chair of the session “Autonomous Vehicle Navigation I” IROS, 2021.
5. Chair of the session “Aerial Physical Interaction with the environment”, 1st Workshop on Aerial Robotic Systems Physically Interacting with the Environment, Biograd na Moru, Croatia, October 5th, 2021.
6. Chair of the session “UAS Applications I”, 2021 International Conference on Unmanned Aircraft Systems, Athens, Greece, June 15-18, 2021.
7. Chair of the session “Autonomous Robots”, 2021 European Control Conference (ECC), June 29-July 2, 2021.
8. Chair of the session “*Aerospace Control II*”, 28th Mediterranean Conference on Control and Automation (MED’2020), 16-18 September, 2020, Saint-Raphael, France.
9. Chair of the session “*Estimation and Signal Analysis in Biomedicine and Social Systems*”, 21st IFAC World Congress, 2020.
10. Associate Editor for the 16th IEEE International Conference on Automation Science and Engineering (CASE 2020), August 20-24, Hong Kong, 2020.
11. Member of the International Program Committee for the IEEE Mediterranean Conference on Control and Automation 2020, 16-19 June, 2020, Saint Raphael, France.
12. Chair of the session “Constrained Control” at the European Control Conference (ECC) at Saint Petersburg, Russia, May 12-15, 2020.
13. Chair of the session “Unmanned Aerial Vehicles-II” at the European Control Conference (ECC) at Saint Petersburg, Russia, May 12-15, 2020.
14. Chair of the session “Robotic Vehicles” at the 7th IEEE International Conference on Robotics and Biomimetics (ROBIO) conference, Kuala Lumpur, Malaysia, 6-8 December, 2018.
15. General Co-Chair of the conference IEEE-ASME International Conference on Mechatronic and Embedded Systems and Applications, 2-4 of July, Oulu, Finland, 2018.
16. Co-Chair of the session “Adaptive Control II”, European Control Conference, Limassol, Cyprus, June 12-15, 2018.
17. Member of the Technical committee for the Minexcellence 2019 conference in Santiago, Chile - <https://gecamin.com/minexcellence/>
18. Track Chair for the 11th IEEE International Symposium on Diagnostics for Electric Machines, Power Electronics and Drives, which will be held in Tinos, Greece, 29-1 September 2017. The topic of the Session is “Tools for diagnostics I: Signal analysis based techniques”
19. Special Session Chair for the IASTED conference on Modeling, Identification and Control, February 20-22, 2017, Innsbruck, Austria.
20. Session Chair of “Fault Detection, Fault Diagnosis and Fault Tolerant Control in Real-World Electrometrical Applications, at the 42nd Annual Conference on IEEE Industrial Electronics Society, October 24-27, 2016, Florence, Italy
21. Session Chair of “On Aerial Manipulators: Design and Control”, at the 42nd Annual Conference on IEEE Industrial Electronics Society, October 24-27, 2016, Florence, Italy
22. Session Chair of “Robotics I” at the European Control Conference (ECC’16), Aalborg, Denmark, 2016.
23. Track Chair for the “Robotics in Mining” regular session at the IFAC Workshop on Mining, Mineral and Metal Processing, August 25-27, Oulu, Finland, 2015.

24. Track co-chair for the “Emerging Control Applications II” regular session at the 53rd IEEE Conference on Decision and Control, Los Angeles, California, USA, December 15-17, 2014.
25. *Track co-chair* for the “Quadrotor Control” regular Session at the 2014 IEEE Mutli-conference on Systems and Control, Antibes, France, October 8-10, 2014.
26. *Track co-chair* for “Control Systems & Applications” regular Session at the IEEE International Conference on Electronics, Circuits and Systems (ICECS), Beirut, Lebanon, December 11-14, 2011.
27. *Track co-chair* for “Robotics and Mechatronics” at the IEEE International Conference on Industrial Technology (ICIT), Kos, Greece, 19-21, March, 2012.
28. Co-Chair of the Parallel Session “Mechatronic Systems II”, in the European Control Conference (ECC), July 17-19, Zurich, Switzerland, 2013.
29. Co-Chair of the Parallel Session “Nonlinear Control of UAVs”, in the European Control Conference (ECC), July 17-19, Zurich, Switzerland, 2013.
30. Chair of the Regular Session “Manufacturing Systems”, in the 21th IEEE Mefiterranean Conference on Control and Automation, June 27, 2013, Crete, Greece.
31. Chair of the Regular Session “Fault Detection I”, in the 21th IEEE Mefiterranean Conference on Control and Automation, June 27, 2013, Crete, Greece.
32. Chair of the Parallel Session “*Intelligent Control Systems and Optimization B*”, in the 9th International Conference on Informatics in Control, Automation and Robotics – ICINCO 2012, Rome, Italy, 28-31, July, 2012.
33. Chair of the Session “*Modelling and Control*” in the 2012 IEEE International Conference on Industrial Technology, Athens, Greece.
34. Co-Chair of the session “*Networked Control Systems IP*” in the American Control Conference 2007
35. Chair of the Parallel Session 3a – “*Robotics and Automation*” in the 7th International Conference on Informatics in Control, Automation and Robotics – ICINCO 2010, Funchal Madeira, Portugal, 15-18 June, 2010.
36. Chair of the, Parallel Session “*Autonomous Vehicle Control*”, in the 7th IFAC Symposium on Intelligent Autonomous Vehicles, Lecce, Italy, September 6-8, 2010.
37. Chair of the session “*Space and Air Robotics*” in the 2nd Hellenic Conference in Robotics, HEROC’11, Patra, Greece, 9-10, December 2010.

5.3 Academy Membership

1. Member of the Aerial Robotics Topic Group of euRobotics
2. Member of the Institute of Electrical and Electronic Engineers (IEEE) No: 80604587
3. Member of the IASTED Technical Committee on Control for the years 2006-2009

5.4 Editorial/Advisory Board of International Journals/Associate Editor

1. Editor, Electronics Letters, Elsevier
<https://digital-library.theiet.org/content/journals/el>

2. Member of the IFAC TC on Robotics
3. Editor, Journal of Intelligent and Robotic Systems, Springer
<http://www.springer.com/engineering/robotics/journal/10846>
4. Associate Editor, IET Electronics Letter Journal
<https://digital-library.theiet.org/content/journals/el>
5. Editorial Member Automatic Systems and Control MDPI
<http://www.mdpi.com/journal/asc>
6. Editorial Member in Diagnostyka Journal
<http://diagnostyka.net.pl/index1.php?page=84>
7. Editorial Member in Automation Journal MDPI
<https://www.mdpi.com/journal/automation>
8. Editorial Member in Drones Journal MDPI
<https://www.mdpi.com/journal/drones>

5.5 Peer-Review Assignments for Journals and Conferences

- Journals (Multiple times Review Assignments)
 1. IEEE Industrial Electronics Magazine
 2. IEEE Control Systems Magazine
 3. Automatica
 4. IEEE Transactions on Automatic Control
 5. IEEE Transactions on Control Systems Technology
 6. IEEE Transactions on Industrial Electronics
 7. IEEE Transactions on Industrial Informatics
 8. IEEE Transactions on Mechatronics
 9. IEEE Transactions on Robotics
 10. IEEE Transactions on Aerospace and Electronic Systems
 11. IEEE Transactions on Cybernetics
 12. IEEE Systems Journal
 13. IET Control Theory and Applications
 14. Journal of Vibration and Control, Elsevier
 15. Asian Journal of Control, Springer
 16. International Journal of Control
 17. Mediterranean Journal of Computers and Networks
 18. Reviewer for the IEEE Industrial Electronics Society
 19. Journal of Circuits, Systems and Computers, World Sky Net
 20. Mechatronics Journal, Elsevier
 21. Information Sciences, Elsevier
 22. Mechanical Systems and Signal Processing, Elsevier
 23. Journal of the Franklin Institute, Elsevier
 24. Journal of Aerospace Science and Technology, Elsevier

25. Journal of Aerospace Engineering, Proceedings of the Mechanical Engineers
26. Journal of Intelligent and Robotic Systems
27. International Journal of Electrical Power and Energy Systems, Elsevier
28. International Journal of Electric Power Systems Research, Elsevier
29. International Journal of Geographical Systems
30. Journal of Mechanical Engineering Science
31. Journal of Process Control, Elsevier

➤ Conferences

1. Control and Decision Conference 2008, CDC2008
2. European Control Conference 2003, ECC2003
3. European Control Conference 2007, ECC2007
4. International Conference on Control & Automation 2006
5. Modeling Identification and Control(MIC2007) – IASTED
6. Modeling Identification and Control(MIC2008) – IASTED
7. Intelligent Systems and Control(ISC2007) – IASTED
8. Applied Simulation and Modeling (ASM2007) – IASTED
9. Control and Application (CA2008) – IASTED
10. International Conference on Industrial Technology (ICIT2008) – IEEE
11. 32nd Annual Conference of the IEEE Industrial Electronics Society (IECON'06)
12. 33rd Annual Conference of the IEEE Industrial Electronics Society (IECON'07)
13. IEEE Multi-conference on Systems and Control 2007 (MSC2007)
14. 17th IFAC World Congress
15. 5th International Conference on Industrial Informatics (INDIN 2007)
16. 2007 IEEE International Symposium on Industrial Electronics (ISIE2007)
17. IEEE International Conference on Industrial Technology (ICIT'08)
18. IEEE International Conference on Industrial Technology (ICIT'09)
19. American Control Conference (ACC'09)
20. European Control Conference (ECC'09)
21. Second International Conference on Robot Communication and Coordination (ROBOCOMM'09)
22. Control and Decision Conference 2009, CDC2009
23. Modeling Identification and Control 2009, MIC2009
24. IEEE Conference on Automation Science and Engineering 2009, CASE2009
25. Mediterranean Conference on Control and Automation (MED'09)
26. American Control Conference (ACC'10)
27. Mediterranean Conference on Control and Automation (MED'10)
28. Control and Decision Conference 2009, CDC2010
29. IEEE International Conference on Emerging Technologies and Factory Automation (ETFA'2010)
30. IEEE Global Communication Conference Exhibition & Industry Forum (GLOBECOM'2010)
31. IEEE 3rd International Symposium on Resilient Control Systems (ISRCS'2010)
32. 19th Mediterranean Conference on Control and Automation, Corfu, Greece, 2011
33. 50th IEEE Conference on Decision and Control and European Control Conference, Orlando, USA, 2011.

34. 16th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA'2011), Toulouse, France, 2011.
35. 5th IEEE International Conference on Cybernetics and Intelligent Systems and The 5th IEEE International Conference on Robotics, Automation and Mechatronics, Qingdao, China, 2011
36. IEEE American Control Conference, Montreal, Canada, 2012
37. IEEE Mediterranean Control Conference, Barcelona, Spain, 2012
38. IEEE International Conference on Robotics and Automation, Karlsruhe, Germany, 2013
39. European Control Conference, Zurich, Swiss, 2013

5.6 Supervision

Master and PhD students have a significant role in all my activities. Through the proper and fruitful cooperation with them, mutual academic evolvement can be achieved, gaining of expertise and contacting world class research. I am trying not to have a centralized way of supervising the Master and PhD students, allowing to develop their own approach and strategy in solving specific research problems. I am trying to follow the work of all the students equally and in an everyday basis, discussing all the problems that they have, not only in the academia, but also in their personal and social life. I try to stand next to them first as a friend and then as a supervisor that they respect and follow, without classical strict approaches and intense hierarchies.

The best proof for my practical experience in Supervision and Examination is coming from the people that have collaborated with me in the past during their Master Thesis or their PhD Thesis. I am very proud for all of the work that they have achieved and for all that they have managed.

- Currently, based on the latest received funding, there are 3 Phd and 4 Post doc positions, while there will be added 2 additional Phd positions in the next month (Feb). Total 9 additional people will be added to the Robotics Team.

Post Doc and PhD Students Supervision				
<i>Ongoing</i>				
Type of Degree	Name	Title of PhD	Main Supervisor	Co-Supervisor
Post Doc	Anton Coval	Collaborative Aerial Robotics	YES	
Post Doc	Avijit Banerjee	Space Autonomy	YES	
Post Doc	George Georgoulas	Machine Learning	YES	
Post Doc	Petros Carvelis	Machine Vision and Machine Learning	YES	

Post Doc	Christophoros Kanelakkis	Cooperative Environmental Perception and Aerial Manipulation for UAVs	YES	
Post Doc	Sina Sharif Mansouri	Cooperative and Decentralized Control Schemes for ground and aerial vehicles	YES	
Post Doc	Rucha Sawlekar	Biomimetic Robotics	YES	
Post Doc	Sumeet Satpute	Space Autonomy	YES	
PhD	Björn Lindqvist	Distributed MPC for Collaborative UAVs	YES	
PhD	Andreas Papadimitriou	All terrain aerial vehicles	YES	
PhD	Hedyeh Jafari	Modeling the Risk of Faling and development of a lower part robotic humanoid for replicating the fear		YES
PhD	Ourania Tsilomitrou	Networked Controlled Systems		YES
Phd	Achilleas Seisa	Edge Robotics	YES	
PhD	Akash Patel	Collaborative 3D exploration with Aerial Vehicles	YES	
PhD	Samuel Karlsson	Collaborative perception for localization, mapping and planning for aerial robotics	YES	
PhD	Moumita Banarjee	Distributed collaborative perception and localisation	YES	
PhD	Vigneshh Kottayam Viswanathan	Collaborative perception for localization, mapping and planning for aerial robotics	YES	
PhD	Yifan Bai	Collaborative exploration	YES	
Research Engineer	Jakub Haluska	Robotics	YES	
Research Engineer	Ilias Tevetzidis	Robotics	YES	
Completed Post Doc and PhDs				

Type of Degree	Name	Title of PhD and defense date	Main Supervisor	Co-Supervisor
Post Doc	Emil Fresk	Cooperative Aerial Vehicles	YES	
Post Doc	George Andrikopoulos	Biorobotics	YES	
Post Doc	Miguel Castano	Networked Process Control	YES	
Post Doc	Roland Hostettler	Process Control (6 months)	YES	
PhD	Elias Small	Cooperative Vision for UAVs	YES	
PhD	Sumeet Satpute	Guidance and Control for Multiple Spacecraft Formation	YES	
PhD	Angelica Brusell	Advanced Control Algorithms for climbing robots in harsh environments	YES	
PhD	Konstantinos Gountas	Cooperative control of UAVs with manipulators		YES
PhD	Emil Fresk	The core of UAVs	YES	
PhD	Mohammed Obaid Mustafa	Fault Detection in Induction Motors 17/3/2015	YES from 2/1/2014 Licentiate on 4/12/2012	
PhD	Thaker Nayl	Control of Articulated Vehicles 12/6/2015	YES from 11/09/2014 Licentiate on 17/06/2014	
PhD	Tarek Edrees	Structural Control and System Identificaiton 26/3/2015		YES
PhD	George Andrikopoulos	Modeling and Control of Pneumatic Artificial Muscles 12/7/2015	YES From 1/9/2012	
PhD	Kostas Alexis	Constrained Cooperative Control of Quadrotor Helicopters 2012		YES
PhD	Marialena Vagia	Robust Control of MEMS 2011		YES

PhD	Dionisis Kandris	Dionisis Kandris 2013		YES
PhD	Valia Karastergiou	Exoskeletons Design		YES
Post Doc	Tarek Edrees	Structural Building Control and Identificaiton	YES	

5.7 Courses

The following table provides a quick overview of the courses that I have taught or have developed, including the typical enrollment, the required/non-required status and the level of the course provided. Following this table, a description of these courses and more details on the focus and the content are being provided.

Title	Number	Average Enrollment	Type	Graduate/Undergraduate	Responsible for Course Development
Robotics for All	R7006E	150-200	Selective	Undergraduate	YES
Guidance, Navigation and Control for Spacecrafts	R7030R	30-40	Selective	Undergraduate/Graduate	Yes (New Course)
Robotics	R7010E	30-40	Selective	Undergraduate/Graduate	YES
Industrial Automation	R7008E	20-30	Selective	Undergraduate/Graduate	YES
Scientific Article Reviewing in the Area of Control Systems	-	5-10	Selective	Graduate	YES
Mekatronics	E7012E	40-50	Selective	Undergraduate	YES
Non Linear and Optimal Systems	R7004E	15-20	Selective	Undergraduate/Graduate	NO
Automatic Control Systems	22Y506	150-180	Required	Undergraduate	NO
Robust Control Systems	22Δ906	40-50	Selective	Undergraduate/Graduate	NO

Automatic Control Systems	22Y606	150-180	Required	Undergraduate	NO
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