

# Shahab Heshmati-alamdari

Assistant Professor (tenure track), Aalborg University

Date of birth: 24 May 1984, Nationality: Greek, Iranian

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## Research interests:

constrained-based planning & control of autonomous robotic systems (mobile, underwater, and aerial), task planning and distributed control of multi-robot systems, interaction & cooperative manipulation control for floating-based manipulator systems, learning based control.

## Education

- **PhD in Automatic Control and Robotics** 9/2012 - defense date:12/2018  
*National Technical University of Athens (NTUA)* Athens, Greece  
– Dissertation Title: Cooperative and Interaction Control for Underwater Robotic Vehicles (PDF)  
– PhD supervisor: Prof. Kostas J. Kyriakopoulos
- **MSc in Automatic Control Systems and Robotics** 12/2009 - 3/2012  
*National Technical University of Athens (NTUA)* Athens, Greece
- **MEng in Mechanical Engineering** 10/2003 - 12/2009  
*National Technical University of Athens (NTUA)* Athens, Greece

## Professional and Research Experience

- **Aalborg University, Department of Electronic Systems** Aalborg, Denmark  
*Assistant Professor (tenure track)* 5/2021 - present
- **TUM Technical University of Munich, Chair of Information-oriented Control** Munich, Germany  
*Postdoctoral Associate* 6/2020 - 5/2021  
– Research topic: Learning based control of autonomous robotic systems; Advisor: Prof. Sandra Hirche.
- **KTH Royal Institute of Technology, Department of Automatic Control** Stockholm, Sweden  
*Postdoctoral researcher* 1/2019 - 6/2020  
– Research topic: Robust control under High-Level Specifications. Advisor: Prof. Dimos V. Dimarogonas
- **NTUA, Control Systems Lab** Athens, Greece  
*PhD researcher* 6/2012 - 12/2018  
– Research topic: Robust cooperative control approaches for autonomous mobile manipulator systems.  
Advisor: Prof. Kostas J. Kyriakopoulos

## Research Visits Abroad

- **Three months PhD research visiting** 9/2016 - 12/2016  
*KTH Royal Institute of Technology* Stockholm, Sweden

## Awards, Scholarships and Honors

- **KTH, Department of Automatic Control** Stockholm, Sweden  
*Awarded a postdoctoral scholarship founded by Kunt & Alice Wallenberg foundation (KAW) among 120 candidates from all over the world.* 8/2018
- **ERCIM Alain Bensoussan Postdoctoral Fellowship** Trondheim, Norway  
*Awarded ERCIM Alain Bensoussan Postdoctoral Fellowship within 222 submissions* 9/2018
- **Marie Skłodowska-Curie actions research fellowships** Athens, Greece  
*Marie Skłodowska-Curie research fellowship award for research career development.* 2014-2017
- **Thomaidion Awards** Athens, Greece  
*Awards for scientific publications for five consecutive years* 2014-2018
- **Undergraduate scholarship** Athens, Greece  
*Awarded undergraduate scholarship founded by ministry of foreign affairs of Greece* 2003-2009

## Publications

Peer reviewed scientific publications: **11** journals, **17** conferences, and **2** book chapters. H-index **12** (GS). i10-index **18** (GS). Total citations **502** (GS).

## Supervision

- 5 Student semester projects, Aalborg University, Aalborg, Denmark 2021
- 1 Supervision of Bachelor thesis, TUM, Munich, Germany 2021
- 1 Co-supervision of Phd student, KTH, Stockholm, Sweden, 2019-2020
- 2 Master student theses, National Technical University of Athens, Greece, 2015-2017

## Teaching

- Teaching lecture in **1** course, Topic: Robotics and control, Department of Electronic Systems, Aalborg University, Aalborg, Denmark , 09/2021-present.
- Teaching lecture in **2** courses at undergraduate level. Topic: Network systems and cooperative control, Chair of Information-oriented Control, Department of Electrical and Computer Engineering, Technical University of Munich, Munich, Germany, 2020-21.
- Teaching assistant in **4** courses for *four consecutive years*, undergraduate level. Topic: Robotics and control, NTUA, Department of Mechanical Engineering, Athens, Greece, 2014-2018.

## Organizational Activities

- **Member of organization team of the 21th IFAC World Congress** Munich, Germany  
*The first completely virtual IFAC World Congress* July, 2021
- **Program organizer of NetCon workshop** Stockholm, Sweden  
*Title: scientific seminar on decision and control* Jan, 2021
- **Organization of scientific presentations** Stockholm, Sweden  
*Scientific seminars and talks* Jan, 2021

## Reviewing Activities

- **Journal Reviewer:** IEEE Transaction on Robotics, International Journal of Control, IET Control Theory & Applications, European Journal of Control, Artificial Intelligence Elsevier, IEEE Transaction on Control System Technology, IEEE Transactions on Automation Science and Engineering, IEEE Transactions on Cybernetics, Autonomous Robots.
- **Conference Reviewer:** IEEE Conference on Decision and Control (CDC), IEEE International Conference on Robotics and Automation (ICRA), IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), IFAC World Congress, IEEE Conference on Control Technology and Applications.

## European Project Activities

- EU project R3COP: Robust & Safe Mobile Co-operative Autonomous Systems, funding agency: ARTEMIS Joint Technological Initiative. Role Researcher. 2010-2013 (participated from 2012).
- EU project THE: The Hand Embodied, Funding agency: FP7-ICT. Role: Researcher. 2010-2014.
- EU project PANDORA: Persistent Autonomy through learNing, aDaptation, Observation and ReplAnning, funding agency: FP7: Cognitive Systems and Robotics (STREP), Role: Researcher. 2012-2015.
- *EU Marie Curie* ROBOCADEMY: European Academy for Marine and Underwater Robotics, Funding agency: EU Marie Curie Program (7th Framework Programme). Role: Grant Holder & leader & Researcher. 2014-2017
- EU project CO4ROBOTS: Achieving Complex Collaborative Missions via Decentralized Control and Coordination of Interacting Robots , Funding agency: H2020-ICT-2016-1 EU project, Role: Researcher. 2017-2020.
- EU project SeaClear: SEArch, identificAtion and Collection of marine Litter with Autonomous Robots, Funded under H2020-EU.2.1.1, grant agreement No. 871295. Role: Researcher. 2020-2021
- Involvement in writing of i) **2** EU H2020, and ii) **2** Swedish proposals . KTH, 2019-2020