Georgios P. Kontoudis

Graduate Research Assistant
Department of Mechanical Engineering
Virginia Tech
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Advisor: Tomonari Furukawa
Co-advisor: Kyriakos Vamvoudakis
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Research interests: Robotics, Mechanisms, Motion Planning, and Manipulation.

EDUCATION
PhD, Virginia Tech, USA   *2016-Present*
Department of Mechanical Engineering
Advisor: Prof. Tomonari Furukawa
Co-advisor: Prof. Kyriakos Vamvoudakis
Current GPA: 4.0/4.0
Coursework: Advanced Experimental Robotics, Optimization Techniques, Bayesian Robotics, Cyber-Physical
Systems & Distributed Control, Motion Planning Analysis
Diploma (MSc), National Technical University of Athens, Greece   *2012-2016*
School of Mechanical Engineering
Advisor: Prof. Kostas J. Kyriakopoulos
Co-advisor: Prof. Minas V. Liarokapis
Grade: 7.76/10 (*top 20%*)
BSc, Piraeus University of Applied Sciences, Greece   *2005-2010*
Department of Mechanical Engineering

RESEARCH EXPERIENCE
Graduate Research Assistant   *May 2017 - Present*
Computational Multiphysics Systems Laboratory
School of Mechanical Engineering, Virginia Tech, USA
Member & Research Associate   *September 2014 - Present*
The OpenBionics Initiative
Research Assistant   *April 2014 - March 2016*
Control Systems Laboratory
School of Mechanical Engineering, National Technical University of Athens, Greece

TEACHING EXPERIENCE
Graduate Teaching Assistant   *August 2016 - May 2017*
School of Mechanical Engineering, Virginia Tech, USA
➢ Lectured 80 students in a senior level, control systems lab.   *Fall 2016*
➢ Guided 20 students in a series of 8 junior level, mechanical engineering labs.   *Spring 2017*

AWARDS & HONORS
Thomaideio Award, NTUA   *Greece 2016*
Hackaday Prize, 2nd place (among 900)   *USA 2015*
Robotdalen Innovation Award, 1st place   *Sweden 2015*
IEEE RAS Student Travel Award (IROS)   *Germany 2015*

PROFESSIONAL EXPERIENCE

Senior Mechanical Engineer   *March 2016 - June 2016*
Heliix Inc., Athens, Greece
➢ Worked on product design & development of a waste heat recovery device.
Site Supervisor   *September 2013 - August 2015*
Sychem S.A., Athens, Greece
➢ Provided guidance to industrial maintenance crew of 6 people for a desalination plant.
Mechanical Engineer   *October 2010 - September 2013*
Sychem S.A., Athens, Greece
➢ Monitored and commissioned desalination plants.
Aircraft Maintenance Engineer Trainee   *May 2008 - January 2010*
Olympic Aviation, Athens, Greece
➢ Performed engineering work of maintenance and modification of aircrafts.

PUBLICATIONS

Peer–Reviewed Conference Publications
[1] **George P. Kontoudis**, Minas V. Liarokapis, Agisilaos G. Zisimatos, Christoforos I. Mavrogiannis and Kostas J. Kyriakopoulos, "Open-Source, Anthropomorphic, Underactuated Robot Hands with a Selectively Lockable Differential Mechanism: Towards Affordable Prostheses", *IEEE/RSJ International Conference on Intelligent Robots and Systems* (**IROS**), *Hamburg (Germany), 2015.* [BibTeX][PDF][Video]

Technical Reports
[2] **George P. Kontoudis**, Minas V. Liarokapis, Agisilaos G. Zisimatos, Christoforos I. Mavrogiannis and Kostas J. Kyriakopoulos, "How to Create Affordable, Anthropomorphic, Light-Weight Prosthetic Hands", *Control Systems Lab, School of Mechanical Engineering, National Tech. University of Athens, Oct. 2015.* [BibTeX] [PDF]

[1] Agisilaos G. Zisimatos, Minas V. Liarokapis, Christoforos I. Mavrogiannis, **George P. Kontoudis** and Kostas J. Kyriakopoulos, "How to Create Affordable, Modular, Light-Weight, Underactuated, Compliant Robot Hand", *Control Systems Lab, School of Mechanical Engineering, National Technical University of Athens, January 2015.* [BibTeX] [PDF] [Video]

Theses
[1] **George P. Kontoudis** "Design and Development of an Underactuated, Anthropomorphic Robot Hand", *Diploma Thesis, National Technical University of Athens (NTUA), Athens, Greece, March 2016 (In Greek).* [BibTeX] [PDF]

SKILLS

Languages: English, Greek(native)
Operating Systems: Linux, ROS, Windows
Design and Simulation Software: Solidworks, AutoCAD, ANSYS, Slic3r, ProCAST, PSpice, Cura
Programming: Pyhton, C, Matlab, HTML/CSS, LaTeX
Other Skills: Laser cutting, 3D printing

SERVICE ACTIVITIES

Reviewer: International Journal of Advanced Robotic Systems

MEMBERSHIPS & SOCIETIES

Memberships
IEEE - Student Member   *2015 - Present*
ASME - Student Member   *2016 - Present*
Societies
IEEE - Robotics and Automation (RAS)   *2015 - Present*
IEEE - Control Systems (CSS)   *2017 - Present*