

Spyridon (Spyros) G. Tarantos

Curriculum vitae ai fini della pubblicazione

e-mail: tarantos@diag.uniroma1.it

RESEARCH INTERESTS

Dynamic modeling, motion planning with safety considerations, optimal control and nonlinear model predictive control, applied to robotic systems with particular focus on mobile manipulators.

EDUCATION

11.2018 – present:	Sapienza University of Rome PhD Candidate PhD Program in Automatic Control, Bioengineering and Operations Research Curriculum: Automatic Control Supervisor: Prof. Giuseppe Oriolo	<i>Rome, Italy</i>
9.2012 – 11.2017:	National Technical University of Athens (NTUA) 5-year Diploma in Mechanical Engineering GPA: 8.58/10.00 - Ranking: 17 out of 177 graduates in 2017 Thesis: "Optimal Grasp Points Selection for Cooperative Underwater Vehicle-Manipulator Systems", Supervisor: Prof. Kostas J. Kyriakopoulos Grade: 10.0/10.0	<i>Athens, Greece</i>
2009 – 2012:	1st Lyceum of Corfu Apolytirion - GPA: 19.7/20.0 (Excellent)	<i>Corfu, Greece</i>

RESEARCH EXPERIENCE

09.2018 – present:	DIAG Robotics Lab, Sapienza University of Rome (Giuseppe Oriolo Group) PhD candidate	<i>Rome, Italy</i>
	<ul style="list-style-type: none">real-time motion generation for mobile manipulators under balance considerationsmotion planning in the presence of moving obstacles	
10.2016 – 08.2018:	Control Systems Lab, NTUA (Kostas Kyriakopoulos Group) Research assistant (11.2017 – 08.2018) Undergraduate research trainee (10.2016 – 11.2017)	<i>Athens, Greece</i>
	<ul style="list-style-type: none">cooperative grasping for underwater vehicle manipulator systems	

TEACHING EXPERIENCE

- Supervisor for the students project "Motion planning for mobile manipulators with sampling-based MPC" as part of the course "Autonomous and Mobile Robotics", 2019

POSTGRADUATE COURSES/TRAINING

07.2019:	PhD course "Model Reduction by Moment Matching for Linear and Nonlinear Systems", SIDRA 2019 PhD Summer School	<i>Bertinoro, Italy</i>
07.2019:	PhD course "Intelligent Collaborative Robotics", SIDRA 2019 PhD Summer School	<i>Bertinoro, Italy</i>
03.2019 – 04.2019:	PhD course "Model Predictive Control", IMT School for Advanced Studies Lucca	<i>Lucca, Italy</i>

ACADEMIC PROJECTS

2015:	<u>Design of Hydraulic Motor and Hydraulic Circuit for a Tunnel Boring Machine (TBM)</u> Case Study for the Course of <i>Hydraulic and Pneumatic Systems</i> Responsible for the analysis and design of TBM's hydraulic circuit.
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2014: **Analysis and Design of a Gearbox for Passenger Vehicle**
Case Study for the Course of *Machine Elements II*
Responsible for the analysis and design of Gearbox's synchronizers.

SOCIETY MEMBERSHIPS

- Technical Chamber of Greece

HONORS AND AWARDS

2018: Winner of the “PhD Scholarship for Foreign Candidates”, Sapienza University of Rome
2010: Award for the success in the 71st Mathematical Competition “Thales” 2010, Hellenic Mathematical Society

SKILLS

Languages: Greek (Native), English (Excellent knowledge), French (Good knowledge), Italian

Programming: MATLAB, C++, C, Python, Fortran, R

Design and Simulation Software: SolidWorks, Ansys, LS-DYNA, Coppelia Sim, Simscape

Other Software: Microsoft Office, LATEX

HOBBIES AND INTERESTS

tennis, swimming, skiing, piano, photography

OTHER PARTICIPATIONS

08.2012:	<u>European Youth Parliament, Ionian International Forum</u> Participated as a delegate	<i>Corfu, Greece</i>
04.2011:	<u>Euroscola</u> Member of the Greek team Member of the winning team of “Eurogame”	<i>Strasbourg, France</i>