Spyros Maniatopoulos

127 Upson Hall • Cornell University • Ithaca, NY 14853, USA • sm2296@cornell.edu • smaniato.github.io • http://verifiablerobotics.com

Education

08/2012 - now **Cornell University**, Sibley School of Mechanical & Aerospace Engineering, Ithaca, NY, USA
- **PhD Student in Mechanical Engineering** • GPA: **4.1**
- Concentration: **Dynamics, Systems, and Controls**
- Minors: (i) **Computer Science**, (ii) *Pending*
- Working with Prof. Hadas Kress-Gazit (hadaskg@cornell.edu) at the Autonomous Systems Lab (ASL)
- **Vice President of SiGMA** (Sibley Graduate students in Mechanical & Aerospace Engineering)

09/2005 - 03/2012 **National Technical University of Athens (NTUA)**, Athens, Greece
- Diploma in Mechanical Engineering (5 year-long degree)
- Diploma drade ("GPA"): 7.71/10 - "*Very Good*" • Diploma Thesis grade: 10/10
- Diploma Thesis: "*Development of Predictive Navigation Schemes for Aircraft-like Vehicles*"
- Diploma Thesis Advisor: Professor Kostas J. Kyriakopoulos, Control Systems Lab (CSL)

09/2002 - 06/2005 **High School,** Athens, Greece (Grade: 18.5/20, Distinction)

Peer-reviewed Publications

[1] ACC 2012 **Spyros Maniatopoulos**, Dimos V. Dimarogonas and Kostas J. Kyriakopoulos,
"*A Decentralized Event-based Predictive Navigation Scheme for Air-Traffic Control,*"
The 2012 American Control Conference, Montréal, Canada, June 2012

[2] NGCUV 2012 Dimitra Panagou, **Spyros Maniatopoulos** and Kostas J. Kyriakopoulos,
"*Control of an Underactuated Underwater Vehicle in 3D Space under Field-of-View Constraints,*"
IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles, Porto, Portugal, April 2012

[3] ACC 2013 **Spyros Maniatopoulos,** Dimitra Panagou and Kostas J. Kyriakopoulos,
"*A Model Predictive Control Scheme for the Navigation of a Nonholonomic Robot with Field-of-View Constraints,*"
The 2013 American Control Conference, Washington DC, USA, June 2013

[4] ICRA 2014 **Spyros Maniatopoulos,** Matthew Blair, Cameron Finucane and Hadas Kress-Gazit,
"*Open-World Mission Specification for Reactive Robots,*"
IEEE International Conference on Robotics and Automation, Hong Kong, China, May-June 2014 (submitted)

Professional / Research Experience

1/2013 - now **Graduate Research Assistant**, *Autonomous Systems Lab* (ASL), Cornell University, NY, USA
- Fall 2013: Coordinating 7 undergraduate and M.Eng. students carrying out research projects under Prof. Kress-Gazit.

6/2010 - 7/2012 **Research Assistant**, *Underwater Robotics Group*, Control Systems Lab, NTUA, Greece
- Worked on the navigation and control of underactuated underwater vehicles
  Project PANDORA EU, FP7, 2011 – 2014):
  "Persistent Autonomy through Learning, Adaptation, Observation and Re-planning"
- Assisted in the management of project R3 - COP:
  "Resilient Reasoning Robotic Co-operating Systems", ARTEMIS Joint Undertaking, 2010 – 2013
- Worked on project iFly (EE, FP6-2005-TREN 4, 2007 – 2011) as part of my thesis:
  "Safety complexity and responsibility based design and validation of highly automated air traffic management"

5/2011 - 6/2011 **Visiting Student**, Automatic Control Lab, KTH Royal Institute of Technology, Stockholm, Sweden
- Invited by Prof. Dimos V. Dimarogonas to work on the decentralization of predictive navigation schemes

06/2009-09/2009 **Summer Internship,** Kallidromo Railway Tunnel, Northern Construction Site, J&P Avax S.A., Greece
- Trainee at the Department of Maintenance and Operation of Site Facilities

Skills / Languages

- Programming: Python, C/C++/C#, FORTRAN, MATLAB, HTML, CSS
- Software Tools: git, LaTeX, Matlab Simulink, Mathematica, AutoCAD 2D
- Languages: English (CPE Uni. of Cambridge/Michigan, TOEFL: 115/120), French, Greek (native)