

# Spyros Maniatopoulos

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## Education

- 08/2012 - now      **Cornell University**, Sibley School of Mechanical & Aerospace Engineering, Ithaca, NY, USA
- **PhD in Mechanical Engineering** - Concentration: **Dynamics, Systems, and Controls**
  - Working with Prof. [Hadas Kress-Gazit](#) at the Autonomous Systems Lab ([ASL](#))
- 09/2005 - 03/2012      **National Technical University of Athens (NTUA)**, Athens, Greece
- Diploma in **Mechanical Engineering** (5 year-long degree) - **Air and Ground Transport Vehicles** specialization
  - Diploma degree Grade: 7.71/10 - “*Very Good*”
  - 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)

## 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 (submitted)

## Professional / Research Experience

- Research Interests      Control Systems, Robotics, Decision Making
- 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 CSL’s Underwater Robotics Group
  - 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”
  - Assisted with lab exercises and demonstrations for undergraduate-level courses on  
Industrial Electronics, Control Systems I & II, Microprocessors based Control, Intelligent Systems and Robotics
- 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
  - Reference: [Nick Rigopoulos](#), Construction Manager

## Skills

- Programming: C/C++ (basic), Python (intermediate), FORTRAN (intermediate)
- Software: Matlab/Simulink, Mathematica, AutoCAD 2D, LaTeX

## Languages

- English (fluent – CPE Uni. of Cambridge, CPE Uni. of Michigan, TOEFL iBT score: 115/120),  
French (moderate – DELF A1-A4), Spanish (basic – not certified), Greek (native)