

# Konstantinos I. CHATZILYGEROUDIS

## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Nottingham, Great Britain | 5 February 1991  
CITIZENSHIP: Greek & UK (claiming)  
MARITAL STATUS: Married  
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GITHUB: [GitHub Account](#)  
BITBUCKET: [Bitbucket Account](#)  
LINKED-IN: [Linked-In Account](#)

## PROFILE

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I recently graduated from **Computer Engineering and Informatics Department** of University of Patras with **8.25/10 GPA**. My academic interests lie in the areas of *Robotics, Robot Locomotion, Artificial Intelligence, Machine Learning, 2D/3D Computer Graphics, Computer Vision, and Software Engineering*. In addition, I was **reviewer** in the *3rd IEEE/IFToMM International Conference on Reconfigurable Mechanisms and Robots (ReMAR 2015)*.

I am, also, a member of the [Robotics Club](#) of the Mechanical Engineering and Aeronautics Department of University of Patras, where we have regular discussion meetings on Robotics (ROS), programming (C++/Python/Matlab) and algorithms, and we're developing several robotics projects.

## EDUCATION

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SEPT 2009-2014 (Under)graduate Degree in COMPUTER SCIENCE AND ENGINEERING, **University of Patras**  
It is a five year program that leads to a Master's equivalent degree(300 ECTS).  
Specialized in software engineering, computer graphics, A.I. and robotics.  
Diploma Thesis: **Navigation of Humanoid Robot Nao In Unknown Space With Dynamic Obstacles**  
Advisors: Nikos ASPRAGATHOS, Emmanouil PSARAKIS, Ioannis HATZILYGEROUDIS, Aris SYNODINOS  
GPA: 8.25/10.0 (5% of my class)

2010-TODAY Online Courses at **Coursera, Udacity, edX**  
I have attended and completed over 15 online courses covering a very broad range of topics, including **Software Engineering, Artificial Intelligence, Robotics, Control Theory, Machine Learning, Game Theory, Digital Signal Processing, e.t.c.**

JULY 2009 High School, **G.E.L. Kato Kastritsiou**, Patras  
GPA: 19.3/20

## PUBLICATIONS

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CONFERENCES

- P. Koustoumpardis, K. Chatzilygeroudis, A. Synodinos, N. Aspragathos  
**"Human robot collaboration for folding fabrics based on force/RGB-D feedback"**  
24th Inter. Conf. on Robotics in Alpe-Adria-Danube Region, 27-29 May, 2015, Bucharest, Romania

## WORK EXPERIENCE

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MAY 2015-TODAY	<p>Google Summer of Code 2015 Intern at OPEN SOURCE ROBOTICS FOUNDATION</p> <p>As a GSoC 2015 intern, I will focus on adding more features to the core library of the Ignition Robotics Transport Library.</p>
JANUARY 2015-TODAY	<p>Programmer at INSTITUTE FOR LANGUAGE AND SPEECH PROCESSING, Athens</p> <p>I am market researching and setting up a laboratory for multi-modal human-computer interaction based on expressive speech synthesis (robots, avatars, motion capture systems, microphone arrays, e.t.c.).</p>
MARCH 2014-JUNE 2014	<p>Intern at BIT MY JOB, Patras</p> <p>During my internship at <a href="#">Bit My Job</a> I developed a framework for Tablet (Android) to Server (Java) communication for live-scoring purposes in shooter tournaments. Also, I created several websites using PHP, Joomla or Wordpress. My internship had duration of 3 months.</p>
OCT 2013-DEC 2103	<p>Programmer at LABORATORY FOR MANUFACTURING SYSTEMS AND AUTOMATION, University of Patras</p> <p>Worked on CAPP 4 SMEs European Project. I was developing 3D/2D simulation (using Java and OpenGL) and a Web Application (using Ruby on Rails).</p>

## HONORS & AWARDS

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AUGUST 2009	<p>GREEK NATIONAL EXAMS - ADMISSION EXAMS</p> <p>Ranked <b>1st in admission exams</b> for the Computer Engineering and Informatics Department of University of Patras among 250 students who succeeded.</p> <p>GPA: 19.285/20.000</p>
MAY 2010	<p>MICROSOFT IMAGINE CUP COMPETITION</p> <p>Ranked among the <b>150 best teams</b> with team TTD (as a game designer/developer) at the Game Development part of the International "Imagine Cup 2010" competition (organized by Microsoft) with the project/game <a href="#">Spring</a></p>

## SKILLS

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<b>Strong Knowledge:</b>	<p>C/C++</p> <p>Robotics Operating System (ROS)</p> <p>Java, C#, Python</p> <p>Object Oriented Programming &amp; Design</p> <p>Game-Graphics Programming</p> <p>Mathematics for 2D/3D Graphics</p>
<b>Intermediate Knowledge:</b>	<p>Ruby</p> <p>Screw Theory</p> <p>XNA, DirectX10, OpenGL</p> <p>Matlab/Octave</p> <p>MVC Web Development with RUBY ON RAILS or HTML, PHP</p> <p>Javascript/jQuery</p> <p>Android Programming</p> <p>CSS3, HTML5</p>

## ACTIVITIES & PROJECTS

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### PROGRAMMING

- C#/XNA Games
- C/C++ University Assignments (including unix semaphores, shared memory, sockets, object-oriented design and data structures design)
- Prolog University Assignments
- Octave/Matlab for Online Courses Assignments ("Introduction to Machine Learning" and "Neural Networks for Machine Learning" in Coursera)

### ROBOTICS

- Interested in advancing in this field
- Worked with NAO Robot in my Diploma Thesis
- ROS Stack [nao\\_dcm](#) for NAO Robot
- ROS Packages ([nao\\_gazebo](#)) to simulate NAO Robot in Gazebo simulator
- Studied Bipedal Robot Locomotion in my Diploma Thesis
- Project Manager in [Robotics Club](#) project "[Polymechanon](#)" - a robot for rescue scenarios
- Assignments for "Control of Mobile Robots" online course (simulated Khepera III robot)

### AI & MACHINE LEARNING

- Interested in advancing in this field
- University Projects (Python) with focusing on Natural Language Processing
- Octave/Matlab for Online Courses Assignments ("Introduction to Machine Learning" and "Neural Networks for Machine Learning" in Coursera)

### COMPUTER GRAPHICS

- Interested in advancing in this field
- A simple C++ Raytracer from scratch (github)
- University Projects using OpenGL (bitbucket)

### WEB

- I have created websites using mainly the MVC Framework and either Ruby on Rails or PHP.
- Example: [Anagennisi Patron Table Tennis Academy](#)

### SPORTS

- 2012-2014: Table Tennis player in highest league in Greece.
- 2010-2014: Head coach at Table Tennis Academy "Anagennisi Patron".
- 2002-2012: Table Tennis player in various leagues in Greece.

## SCHOLARSHIPS

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NOVEMBER 2009    1st in Admission Exams Scholarship (€500 + 1 netbook)

## LANGUAGES

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ENGLISH:    Fluent (Proficiency - *C2*)

GREEK:    Native

FRENCH:    Basic Knowledge (Lower - *B2*)

## INTERESTS & ACTIVITIES

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Technology, Open-Source, Programming  
Table Tennis, Football, Drawing