Konstantinos Chatzilygeroudis

Curriculum Vitae

Panepistimiou 412 GR-26443, Patras, Greece \$\Pi\$ +30 69 78 120 104 □ costashatz@gmail.com □ http://costashatz.github.io



At a glance

Current Positions Computer Vision R&D Team Leader at Metargus startup

Adjunct Lecturer at CEID, University of Patras, Greece Robotics Engineer at Ragdoll Dynamics, London, UK External Teaching Staff at HOP, Patras, Greece

Research Affiliate at CILab, University of Patras, Greece

Previous Position Post-Doctoral Fellow at LASA - EPFL, Switzerland

Education PhD in Robotics/Machine Learning

Honors Ranked in top 5% at Computer Engineering and Informatics Department

2014 Graduation

Scientific Activities Junior Co-Chair at IEEE TC on Model-based Optimization for Robotics,

Associate Editor at IROS

Research Keywords Robot Learning, Reinforcement Learning, Evolutionary Robotics, Machine Learn-

ing

Education

Oct 2015–Dec 2018 PhD in Robotics and Machine Learning, University of Lorraine - Inria Nancy

(LARSEN Team), France.

September 2016 Gaussian Process and Uncertainty Quantification Summer School, Uni-

versity of Sheffield, UK.

Organizers: Javier Gonzalez, Richard Wilkinson, Jeremy Oakley, Neil Lawrence,

Sheffield ML Group

2009–2014 Diploma of Computer Engineering and Informatics, CEID, University of

Patras, Greece, GPA - 8.25/10.

Specialized in Artificial Intelligence, Robotics, Software Engineering and Computer

Graphics - Top 5%

Other

2010–2015 **Online Courses**, *Coursera*, *edX*, *Udacity*.

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.

2006–2009 High School, G.E.L. Kato Kastritsiou, Patras, Greece, GPA – 19.3/20.

Specialized in Mathematics/Physics

Academic/R&D Experience

Oct 2021-Jul 2022 Adjunct Lecturer, Department of Computer Engineering & Informatics (CEID), University of Patras, Patras, Greece.

I am teaching the undergraduate courses: "Introduction to Artificial Intelligence",

and "Intelligent Systems and Robotics".

Oct 2021-Jul 2022 External Teaching Staff, Hellenic Open University (HOP), Patras, Greece.

Teaching at the laboratory class "Introduction to Programming (Python)".

Aug 2021-Now Robotics Engineer, Ragdoll Dynamics, Imbalance Ltd., London, UK.

> Integrating state-of-the-art model-based control algorithms in Maya characters for improving the workflow of animators.

Jan 2021–Now **Computer Vision Team Leader**, *Metargus*, Startup, Patras, Greece.

> Leading the R&D Computer Vision Team. Metargus creates software for automated basketball game/practice analysis.

Jun 2020-Now Research Affiliate, Computational Intelligence Laboratory (CILab), University

of Patras, Department of Mathematics, Patras, Greece.

Research Topic: Evolutionary Robotics, Evolutionary-Based Reinforcement Learning

Scientific Collaborator: Michael N. Vrahatis

Oct 2020-Jul 2021 **Adjunct Lecturer**, Department of Computer Engineering & Informatics (CEID),

University of Patras, Patras, Greece.

Taught the undergraduate courses: "Introduction to Artificial Intelligence", and

"Intelligent Systems and Robotics".

Nov 2020-Dec 2020 Research Fellow, Big Data Lab, Hellenic Open University, Patras, Greece.

Research Topic: Efficient Methods for Entity Resolution

Scientific Supervisor: Vassilios Verykios

Research Fellow, Computer Technology Institute and Press "Diophantus" Apr 2020-Dec 2020

(CTI), Patras, Greece.

Research Topic: Robot Learning, Reinforcement Learning and Game Theory

Funding: Project NETO

Project Director: Theodoros Komninos Scientific Collaborator: Paul Spirakis

Oct 2018-Mar 2020 Post-Doctoral Fellow, EPFL (LASA Team), Lausanne, Switzerland.

Research Topic: Robot Learning and Adaptation

Funding: ERC "SAHR" Project, CHIST-ERA "CORSMAL" Project

Supervisor: Aude Billard

Oct 2015-Sept 2018 Doctoral Researcher, Inria (LARSEN Team), Nancy, France.

Research Topic: Micro-Data Reinforcement Learning for Adaptive Robots

Funding: ERC "ResiBots" Project Supervisor: Jean-Baptiste Mouret

Sep-Dec 2017 Teaching Assistant in Post-Graduate Real-Time Programming Course.

UPMC - University Pierre and Marie Curie, SPI Master, Paris, France.

The lab excercises involved the Orocos Real-Time Toolkit and Linux kernel modules.

Professor: Ludovic Saint-Bauzel

Other Work Experience

Jan-Sep 2015 **Computer/Software Engineer**, *Institute of Language and Speech Processing*, Athens, Greece, Scholarship.

Computer/Software Engineer at Institute for Language and Speech Processing, Athens. I was 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.). My main duties involved searching for available hardware and selecting the most appropriate given specific user/scientific cases. I was, also, involved in integrating *Innoetics'* software into modules of the humanoid robot NAO and creating the infrastructure for easy code re-use.

May-Aug 2015 Google Summer of Code 2015, Open Source Robotics Foundation.

As a GSoC 2015 intern, I focused on adding more features to the core library of the *Ignition Robotics Transport Library*. The main tasks involved code restructuring using C++11 features and enabling easy code re-use and enhancing modularity. I was also involved in creating some command line tools for the library.

Mar-Jun 2014 Intern, Bit My Job, Patras, Greece.

During my internship at Bit My Job 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 a duration of 3 months.

Miscellaneous

Nov-Dec 2013 **Programmer**, *Laboratory for Manufacturing Systems & Automation*, University of Patras, Greece.

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).

July 2010–June 2015 **Coach**, *Table Tennis Academy "Anagennisi Patron"*, Rion, Greece. I was the head coach of the Table Tennis Academy "Anagennisi Patron".

Publications

Peer-Reviewed Journal Papers

2020 Robust Reinforcement Learning with Bayesian Optimisation and Quadrature, Supratik Paul, Konstantinos Chatzilygeroudis, Kamil Ciosek, Jean-Baptiste Mouret, Michael Osborne, Shimon Whiteson, Journal of Machine Learning Research (JMLR): Special Issue on Bayesian Optimization.

Benchmark for Bimanual Robotic Manipulation of Semi-deformable Objects, <u>Konstantinos Chatzilygeroudis</u>, Bernardo Fichera, Ilaria Lauzana, Fanjun Bu, Kunpeng Yao, Farshad Khadivar, Aude Billard, IEEE Robotics and Automation Letters: Special Issue on Benchmarking Protocols for Robotic Manipulation.

Benchmark for Human-to-Robot Handovers of Unseen Containers with Unknown Filling, Ricardo Sanchez-Matilla*, Konstantinos Chatzilygeroudis*, Apostolos Modas, Nuno Ferreira Duarte, Alessio Xompero, Pascal Frossard, Aude Billard, Andrea Cavallaro, IEEE Robotics and Automation Letters: Special Issue on Benchmarking Protocols for Robotic Manipulation.

- 2019 A survey on policy search algorithms for learning robot controllers in a handful of trials, *Konstantinos Chatzilygeroudis*, Vassilis Vassiliades, Freek Stulp, Sylvain Calinon, Jean-Baptiste Mouret, IEEE Transactions on Robotics.
- 2018 Reset-free Trial-and-Error Learning for Robot Damage Recovery, <u>Konstantinos Chatzilygeroudis</u>, Vassilis Vassiliades, Jean-Baptiste Mouret, Robotics and Autonomous Systems.

^{*} Equal contribution

Limbo: A Flexible High-performance Library for Gaussian Processes modeling and Data-Efficient Optimization, Antoine Cully, Konstantinos Chatzilygeroudis, Federico Allocati, Jean-Baptiste Mouret, The Journal of Open Source Software.

2017 Using Centroidal Voronoi Tessellations to Scale Up the Multi-dimensional Archive of Phenotypic Elites Algorithm, Vassilis Vassiliades, Konstantinos Chatzilygeroudis, Jean-Baptiste Mouret, IEEE Transactions on Evolutionary Computation.

Peer-Reviewed Book Chapters

2021 Quality-Diversity Optimization: a novel branch of stochastic optimization, <u>Konstantinos Chatzilygeroudis</u>, Antoine Cully, Vassilis Vassiliades, Jean-Baptiste Mouret, Black Box Optimization, Machine Learning and No-Free Lunch Theorems, Springer series SOIA.

Edited by: Panos Pardalos, Michael Vrahatis, Varvara Rasskazova.

Machine Learning Basics, <u>Konstantinos Chatzilygeroudis</u>, <u>Ioannis Hatzilygeroudis</u>, <u>Isidoros Perikos</u>, Intelligent Computing for Interactive System Design: Statistics, Digital Signal Processing and Machine Learning in practice, ACM. **Edited by:** Andreas Komninos, Parisa Eslambolchilar, Mark Dunlop.

Peer-Reviewed Conference Papers

- July 2022 **Hierarchical Quality-Diversity for Online Damage Recovery**, *Maxime Allard*, *Simón C. Smith*, *Konstantinos Chatzilygeroudis*, *Antoine Cully*, The Genetic and Evolutionary Computation Conference (GECCO 2022), Boston, USA, Accepted.
- Jun 2022 A Brief Survey of Sim2Real Methods for Robot Learning, Konstantinos Dimitropoulos, Ioannis Hatzilygeroudis, Konstantinos Chatzilygeroudis, Proceedings of the 31st International Conference on Robotics in Alpe-Adria-Danube Region, Klagenfurt am Wörthersee, Austria, Accepted.
- Sept 2021 **Learning of Parameters in Behavior Trees for Movement Skills**, Matthias Mayr, Konstantinos Chatzilygeroudis, Faseeh Ahmad, Luigi Nardi and Volker Krueger, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Prague (Virtual).
- Jun 2021 **Feature Selection in single-cell RNA-seq data via a Genetic Algorithm**, Konstantinos Chatzilygeroudis, Aristidis Vrahatis, Sotiris Tasoulis and Michael Vrahatis, The 15th Learning and Intelligent Optimization Conference (LION), Greece (Virtual).
- Oct 2020 From human action understanding to robot action execution: how the physical properties of handled objects modulate non-verbal cues, Nuno Ferreira Duarte, Konstantinos Chatzilygeroudis, José Santos-Victor and Aude Billard, Proceedings of the Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics (ICDL-EpiRob), Chile (Virtual).
- Oct 2019 **On Force Synergies in Human Grasping Behavior**, *Julia Starke*, *Konstanti-nos Chatzilygeroudis*, *Aude Billard and Tamim Asfour*, Proceedings of the International Conference on Humanoid Robots, Toronto, Canada.
- Oct 2018 Multi-objective Model-based Policy Search for Data-efficient Learning with Sparse Rewards, Rituraj Kaushik, Konstantinos Chatzilygeroudis and Jean-Baptiste Mouret, Proceedings of the Conference on Robot Learning (CoRL 2018), Zurich, Switzerland.

- May 2018 Using Parameterized Black-Box Priors to Scale Up Model-Based Policy Search for Robotics, *Konstantinos Chatzilygeroudis* and Jean-Baptiste Mouret, Proceedings of the International Conference on Robotics and Automation (ICRA 2018), Brisbane, Australia.
- May 2018 Bayesian Optimization with Automatic Prior Selection for Data-Efficient Direct Policy Search, Rémi Pautrat, Konstantinos Chatzilygeroudis and Jean-Baptiste Mouret, Proceedings of the International Conference on Robotics and Automation (ICRA 2018), Brisbane, Australia.

 A short version of the paper was accepted at the non-archival track of the 1st Conference on Robot Learning (CoRL) 2017.
- Feb 2018 Alternating Optimisation and Quadrature for Robust Control, Paul Supratik, Konstantinos Chatzilygeroudis, Kamil Ciosek, Jean-Baptiste Mouret, Michael A. Osborne and Shimon Whiteson, Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence (AAAI 2018), New Orleans, Louisiana, USA.
- Sept 2017 Black-Box Data-efficient Policy Search for Robotics, Konstantinos Chatzilygeroudis, Roberto Rama, Rituraj Kaushik, Dorian Goepp, Vassilis Vassiliades, Jean-Baptiste Mouret, Proceedings of the International Conference on Intelligent Robots and Systems (IROS), Vancouver, BC, Canada.
- May 2015 Human robot collaboration for folding fabrics based on force/RGB-D feedback, Panagiotis Koustoumpardis, Konstantinos Chatzilygeroudis, Aris Synodinos, Nikos Aspragathos, Proceedings of the 24th International Conference on Robotics in Alpe-Adria-Danube Region, Bucharest, Romania, Pages: 235-243.

Peer-Reviewed Workshop Papers

- July 2017 **20 Years of Reality Gap:** a few Thoughts about Simulators in Evolutionary Robotics, Jean-Baptiste Mouret, Konstantinos Chatzilygeroudis, Proceedings of the International Workshop "Simulation in Evolutionary Robotics" at the Genetic and Evolutionary Computation Conference (GECCO).
- July 2017 Comparing multimodal optimization and illumination, Vassilis Vassiliades, Konstantinos Chatzilygeroudis, Jean-Baptiste Mouret, Proceedings of the Genetic and Evolutionary Computation Conference (GECCO) (Poster-only papers), Berlin, Germany.
- July 2017 **A comparison of illumination algorithms in unbounded spaces**, *Vassilis Vassiliades*, *Konstantinos Chatzilygeroudis*, *Jean-Baptiste Mouret*, Proceedings of the International Workshop "Measuring and Promoting Diversity in Evolutionary Algorithms" at the Genetic and Evolutionary Computation Conference (GECCO).
- Dec 2016 Safety-Aware Robot Damage Recovery Using Constrained Bayesian Optimization and Simulated Priors, Vaios Papaspyros, Konstantinos Chatzilygeroudis, Vassilis Vassiliades, Jean-Baptiste Mouret, BayesOpt 2016: Proceedings of the International Workshop on "Bayesian Optimization" at NIPS 2016.
- May 2016 **Towards semi-episodic learning for robot damage recovery**, *Konstantinos*<u>Chatzilygeroudis</u>, Antoine Cully, Jean-Baptiste Mouret, AlLTA '16: Proceedings of the International Workshop "Al for Long-term Autonomy" at ICRA 2016.

Supervision

Master Students

- 2020 Konstantinos Tsinganos Co-supervision with Prof. Evangelos Dermatas of the master thesis at CEID (Univ. of Patras) entitled: "Sim2Real Methods for Visual-Based Imitation Learning", Oct 2020 — Sept 2021
- 2019 Andrea Mussati Co-supervision with Prof. Aude Billard of the master thesis at EPFL entitled: "Effective Exploration in Robotics through Equal-Opportunity Growth of Sub-populations", Oct 2019 — Feb 2020

Undergraduate Students

- Christodoulos Kosta Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Experimenting with Sim2Real Methods in Robotics Tasks", Feb 2021 — Feb 2022
- 2021 Christos Boulafentis Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Sim2Real Methods for Robust Quadruped Locomotion", Oct 2021 — Jun 2022 (expected)
 - Ioannis Prokopiou Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Imitation Learning with Vision Transformers", Oct 2021 — Jun 2022 (expected)
 - Nikolaos Kapetanidis Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Comparison of Supervised Learning Techniques for Learning Robot Dynamical Models", Oct 2021 — Jun 2022 (expected)
 - Agisilaos Kounelis Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Voxel-Based Representations for Efficient Reinforcement Learning", Oct 2021 — Jun 2022 (expected)
 - Anna-Agapi Kirtsia Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "C++ Implementation of Policy Gradient Methods", Oct 2021 — Jun 2022 (expected)
 - Dimosthenis Stergiopoulos Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Experimental Comparison of Reinforcement Learning Algorithms in Robotics Tasks", Feb 2021 — Feb 2022 (expected)
 - Pavlos Konstantinou Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Implementation of Reinforcement Learning Algorithms in C++", Feb 2021 — Jun 2022 (expected)
 - Apostolos Ritsikalis Co-supervision with Prof. Evangelos Dermatas of the diploma thesis at CEID (Univ. of Patras) entitled: "Stable Reinforcement Learning for Continuous Control using Dynamical System-Based Policies", Feb 2021 — Jun 2022 (expected)

Scientific Activities

Chair in Technical Committees

Mar 2022-Now - IEEE-RAS Techincal Committee on Model-Based Optimization for Robotics - Invited to serve as a Junior Co-Chair by the board of the technical committee.

Invited Lectures/Talks

- Dec 2021 **4th Robot Learning Workshop** (NeurIPS) Invited to give a talk on "Data-efficient trial & error adaptation" with Jean-Baptiste Mouret at the 4th Robot Learning Workshop at NeurIPS 2021
- Apr 2021 **RLVS** Invited to give a 2 hour lecture on "Micro-Data Policy Search" with Jean-Baptiste Mouret at the Reinforcement Learning Virtual School (RLVS)
- March 2021 **CEID Social Hour** Invited to give an 1 hour talk on "Micro-Data Reinforcement Learning for Adaptive Robots" at the 26/03/2021 CEID Social Hour event

Special Issue/Workshop Organizer

- Frontiers in Robotics and AI - Guest Editor of a Special Issue on "Sim2Real Robot Learning and Control with Realistic Observations" (2020-2021), Co-organized with Sylvain Calinon and Dimitrios Kanoulas

Editorship & Program Committee Member

- **IROS** one of the top conferences in robotics (**Associate Editor**) (2020, 2021, 2022) invited by Freek Stulp and by Jens Kober
- **CoRL** one of the top conferences in robot learning (**Virtual Chair**) (2021) invited by Raia Hadsell
- Frontiers in Robotics and AI Review Editor in the Field Robotics section of the journal (2020-)
- IJCAI one of the top conferences in AI (Senior PC member) (2021, 2022)
- **AAMAS** one of the top conferences in learning systems (PC member) (2021)
- **RSS** one of the top conferences in robotics (PC member) (2020)
- **GECCO** one of the top conferences in evolutionary computation (*PC* member) (2020)
- **IISA** conference on information, intelligence, systems and applications (PC member) (2019)

Reviewer

- **NeurIPS** one of the top conferences in machine learning (2022)
- ICLR one of the top conferences in machine learning (2022)
- ICAR robotics conference (2021)
- **AAMAS** one of the top conferences in learning systems (2021)
- SP-L ieee signal processing letters (journal) (2020)
- NatMachInt nature machine intelligence (journal) (2020)
- T-RO ieee transactions on robotics (journal) (2019, 2020, 2021)
- ICRA one of the top conferences in robotics (2016, 2017, 2019-2022)
- **RSS** one of the top conferences in robotics (2020)
- **IROS** one of the top conferences in robotics (2019-2022)
- **GECCO** one of the top conferences in evolutionary computation (2020)
- CoRL robot learning conference (2018-2021)
- RA-L robotics and automation letters (journal) (2017-2022)
- **COMIND** Computers in Industry (journal) (2020)
- **IJAIT** journal on artificial intelligence tools (2017)
- **JOSS** the journal of open source software (2018)

- IISA conference on information, intelligence, systems and applications (2019)
- BayesOpt international workshop on bayesian optimization (at NIPS) (2018)
- HFR international workshop on human-friendly robotics (2017)
- **IFAC** world congress on automatic control (2017)
- ReMAR conference on reconfigurable mechanisms and robots (2016)

Open Source Activities

I have contributed in several open-source projects including:

limbo Main developer and maintainer. Limbo is an open-source C++11 library for Gaussian Processes and data-efficient optimization (e.g., Bayesian optimization) that is designed to be both highly flexible and very fast.

robot_dart *Main developer and maintainer.* robot_dart is an open-source C++11 generic wrapper around the DART robotics simulator for easier and faster usage.

iiwa_ros Main developer and maintainer. iiwa_ros contains ROS packages to integrate KUKA's IIWA robots in ROS. This is achieved through the KUKA's Fast Research Interface (FRI) and makes it possible for up to 1KHz control (in torque or position control mode).

roboticsgroup_ *Main developer and maintainer.* roboticsgroup_gazebo_plugins is a collection gazebo_plugins of Gazebo plugins; most notably the *MimicJointPlugin.*

DART Bug reports and fixes. DART (Dynamic Animation and Robotics Toolkit) is a collaborative, cross-platform, open source library that provides data structures and algorithms for kinematic and dynamic applications in robotics and computer animation.

dynamixel_control_hw Developer. dynamixel_control_hw provides a hardware interface for ROS control. Its aim is to allow generic software controllers to control a set of Dynamixel actuators.

Magnum Added DART Integration and bug fixes. Magnum is a lightweight and modular C++11/C++14 graphics middleware for games and data visualization.

Ignition Transport *GSoC 2015.* Ignition transport is a component in the ignition framework, a set of libraries designed to rapidly develop robot applications.

A full list of the projects that I am involved in can be found in my GitHub and bitbucket accounts (*costashatz* username).

PhD Thesis

Title Micro-Data Reinforcement Learning for Adaptive Robots

Supervisor Dr. Jean-Baptiste Mouret

Description Robots have to face the real world, in which trying something might take seconds, hours, or even days. Unfortunately, the current state-of-the-art reinforcement learning algorithms (e.g., deep reinforcement learning) require big interaction times to find effective policies. In this thesis, we explored approaches that tackle the challenge of learning by trial-and-error in a few minutes on physical robots. We call this challenge "micro-data reinforcement learning". Throughout this thesis, our goal was to design algorithms that work on physical robots, and not only in simulation. Consequently, all the proposed approaches have been evaluated on at least one physical robot. Overall, this thesis aimed at providing methods and algorithms that will allow physical robots to be more autonomous and be able to learn in a handful of trials.

Videos http://costashatz.github.io/videos.html

Codes https://github.com/resibots

Diploma Thesis

Title Navigation of Humanoid Robot Nao In Unknown Space With Dynamic Obstacles

Supervisors Professor Nikos Aspragathos & Professor Emmanouil Psarakis & PhDc Aris

Synodinos

Description This thesis dealt with all the fields that give the ability to humanoid robots to

move autonomously in a previously unknown space. It was, mainly, a software development project with a brief bibliographic overview of the major algorithms and techniques in each individual field. The "small" humanoid NAO (from Aldebaran Robotics) was used for the experiments and ROS (Robot Operating

System) as the programming framework.

Grade 10/10

Video NAO Walking in Gazebo: https://www.youtube.com/watch?v=xPg7cal26Z4

Code https://github.com/costashatz/nao_dcm

 $https://github.com/costashatz/nao_gazebo$

Honors & Awards

December 2014 Computer Engineering and Informatics Department Graduation.

Ranked **9th with GPA 8.25/10** amongst 250 students that graduated from the Computer Engineering and Informatics Department of University of Patras in 2014.

August 2009 Greek National Exams - Admission Exams.

Ranked 1st in admission exams for the Computer Engineering and Informatics Department of University of Patras among 250 students who succeeded.

May 2010 Microsoft Imagine Cup Competition.

Ranked among the **150 best teams** 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 *Spring*.

Personal Data

Place/Date of Birth Nottingham, UK | 5 February 1991

Citizenship Greek

Marital Status Married

Address Patras, Greece Phone +30 69 78 120 104

Website http://costashatz.github.io/

E-mail costashatz@upatras.gr, costashatz@gmail.com,

k.chatzilygeroudis@metargus.com

Google Scholar Konstantinos Chatzilygeroudis (user=tnf6B-EAAAAJ)

Linked-In konstantinoschatzilygeroudis

Languages

Greek Native

English Full professional proficiency Fluent both in oral and written (C2)
French Limited working proficiency Basic oral and written skills (B2)