Andreea Radulescu

Largo San Francesco da Paola 5/16
16127, Genova, Italy
+39 3881807693
Andreea.Radulescu@iit.it

Education

2011–2016 **PhD Robotics**, *University of Edinburgh*, School of Informatics.
Institute of Perception, Action and Behaviour

2010–2011 **MSc Artificial Intelligence**, *University of Edinburgh*, School of Informatics,
MSc Thesis: *Exploiting Variable Physical Damping*.
Graduated with Distinction

2004–2009 **Bachelor of Engineering**, *"POLITEHNICA" University of Bucharest*, Faculty of Automatic Control and Computers, *Diploma grade: 9.75 (97.5%)*.
Main field of study: System and Computer Engineering
Specialisation: Automatic Control and Applied Informatics

Experience

2016–present **PostDoctoral Researcher**, Istituto Italiano di Tecnologia.
Advanced Robotics Department - Dynamic Legged Systems

2012–2016 **Teaching Experience**, University of Edinburgh.

- ***2012 - 2013***
  - Teaching Assistant - Data Mining and Exploration
  - Tutor - Informatics Research Proposal
- ***2013 - 2014***
  - Lab Demonstrator - Robotics: Science and Systems
  - Tutor - System Design Process
- ***2014 - 2015***
  - Lab Demonstrator - Robotics: Science and Systems
  - Tutor - System Design Process

2009 **Intern (Process Engineering Department)**, Dacia, Group Renault.
During this internship I have completed my Bachelor Dissertation ("Modifications and backup management procedure for the OSCAR system").

Miscellaneous

2013 - present **Meeting coordinator**, University of Edinburgh.
Organise regular research group meetings. Manage bookings and set up rota.

2013 - 2015 **EIE Conference Staff member**, iVentures.
Part of the support staff team.

2012 - present **Public engagement**, University of Edinburgh.
Science communication volunteer at various public outreach events. Open doors day volunteer.

Invited Talks

25th May 2018 **Robust Locomotion Strategies on the HyQ Robot Series**, *Dynamic Legged Locomotion in Realistic Terrains Workshop*, The International Conference on Robotics and Automation (ICRA 2018), Brisbane, Australia.

Publications

2018 **Simultaneous Contact, Gait, and Motion Planning for Robust Multilegged Locomotion via Mixed-Integer Convex Optimization**, The International Conference on Robotics and Automation (ICRA 2018).
Authors: Bernardo Aceituno-Cabezas, Carlos Mastalli, Hongkai Dai, Michele Focchi, Andreea Radulescu, Darwing G. Caldwell, José Cappelletto, Juan C. Grieco, Gerardo Fernández-López, Claudio Semini

2017 **Learning Optimal Gait Parameters and Impedance Profiles for Legged Locomotion**, Humanoid Robots (Humanoids 2017).
Authors: Elco Heijmink, Andreea Radulescu, Brahayam Ponton, Victor Barasuol, Darwing G. Caldwell, Claudio Semini

2017 **Whole-body Trajectory Optimization for Non-periodic Dynamic Motions on Quadrupedal Systems**, The International Conference on Robotics and Automation (ICRA 2017).
Authors: Andreea Radulescu, Ioannis Havoutis, Darwing G. Caldwell, Claudio Semini

2017 **Trajectory and Foothold Optimization Using Low-Dimensional Models for Rough Terrain Locomotion**, The International Conference on Robotics and Automation (ICRA 2017).
Authors: Carlos Mastalli, Michele Focchi, Ioannis Havoutis, Andreea Radulescu, Sylvain Calinon, Jonas Buchli, Darwing G. Caldwell, Claudio Semini

2017 **Probabilistic Contact Estimation and Impact Detection for State Estimation of Quadruped Robots**, The International Conference on Robotics and Automation (ICRA 2017).
Authors: Marco Camurri, Maurice Fallon, Stephane Bazeille, Andreea Radulescu, Victor Barasuol, Darwing G. Caldwell, Claudio Semini

2017 **Optimal Control of Variable Stiffness Policies: Dealing with Switching Dynamics and Model Mismatch**, *Springer Tracts in Advanced Robotics*, Geometric and Numerical Foundations of Movements.
Authors: Andreea Radulescu, Jun Nakanishi, David J. Braun, Sethu Vijayakumar

2016 **Optimization for non-periodic dynamic motions of legged systems**, The 9th International Workshop on Human-Friendly Robotics (HFR 2016).
Authors: Andreea Radulescu, Ioannis Havoutis, Darwing G. Caldwell, Claudio Semini

2015 **Optimal Control of Multi-Phase Movements with Learned Dynamics**, IEEE International Conference on Man-Machine Interactions (ICMMI).
Authors: Andreea Radulescu, Jun Nakanishi, Sethu Vijayakumar

2014 **Spatio-Temporal Stiffness Optimisation in Movements with Switching Dynamics**, IEEE Transactions on Robotics (T-RO) Journal *(currently under review)*.
Authors: Jun Nakanishi, Andreea Radulescu, David Braun, Sethu Vijayakumar

2013 **Spatio-temporal Optimisation for Multi-phase Movements: Dealing with Contacts and Switching Dynamics**, IEEE/RSJ International Conference of Intelligent Robots and Systems, Tokyo, Japan.
Authors: Jun Nakanishi, Andreea Radulescu, Sethu Vijayakumar

2012 **Exploiting Variable Physical Damping in Rapid Movement Tasks**, IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Kaohsiung, Taiwan **[AIM 2012 Best Student Paper Award Finalist]**.
Authors: Andreea Radulescu, Matthew Howard, David Braun, Sethu Vijayakumar

Awards

2011 Informatics UK/EU Master's Scholarship 2010-2011

Computer skills

Basic	HTML, UML, SQL Server, Assembler, Verilog, LabView, Microsoft Robotics Studio, Corel Paintshop Pro, Autodesk 3ds Max
Intermediate	C++, JAVA, OpenOffice, Linux, Microsoft Windows, Microsoft Office Tools
Advanced	Matlab, Octave, LaTeX

Certificates and activities

2008	CISCO - CCNA1 (Cisco Certified Network Associate)
2008	CISCO - Fundamentals of Java Programming
2008	Student Scientific Conference - POLITEHNICA University of Bucharest *Automated methods of detection for the QRS complex in the ECG*
2007	Summer Course BEST - Vrije Universiteit Brussel *Introduction into aero-spatial engineering*
2006	Summer Course BEST - Budapest University of Technology and Economics *Introduction to networking*
2006	Student Scientific Conference CERC - Technical Military Academy, Bucharest *The use of fractals in image compression*

Languages

English	Fluent	*Cambridge Advanced English Certificate*
Romanian	Native speaker	
German	Intermediate	
Italian	Intermediate	