Sara Colella

Curriculum Vitae

Personal informations

Date and place of birth: *1/3/1991* in Moncalieri (Turin), *Italy*

Address: *via Cirenaica 9,* Turin, *Italy* 10142

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Education

2/9/2013 – 17/12/2015 **Master in Physics of Complex Systems**, *Università degli Studi di Torino*, Turin, Italy. *Final grade* 110/110.

Thesis Title: *A cooperative growth model for plant roots*

Supervisors: Federico Bosia, Barbara Mazzolai & Ettore Vittone

1/10/2010 – 17/7/2013 **Bachelor in Physics** *Università degli Studi di Torino*, Turin, Italy. *Final grade* 99/110.

Thesis Title: *Finite element model of "dry" adhesion on micro structured elements*

Supervisors: Federico Bosia & Michele Caselle

International experiences

Erasmus

9/2013 – 6/2014 **Master in Complex Systems in Applied Physics,** *Chalmers University of Technology* Göteborg, Sweden

Group projects in Automation with the following aims:

- Built a robot able to avoid walls and detect a target using photosensors, based on the Arduino platform
- Programming, using C# programming language, a humanoid robot able to detect a candle and light it

Group project in simulation:

- Programming a simulation of a model of segregation in cities, based on Schiller's model and using Matlab

Personal experience

6 – 8/2008 Lived in a family of locals and attending High School in Adelaide, Australia, with the aim of improving my english language knowledges

Summer School

6/2014 **Erasmus Mundus Summer School in Networks**, *Chalmers and University of Gothenburg*, Göteborg, Sweden.

Lecturers: A. Eriksson, P. Hegarty, M. Nilsson Jacobi, K. Tunström and V. Verendel

Experiences

Reseach

10/2016–now **PhD student**, *Computer Science department & Graduate School of Computer Science*, Konstanz, Germany.
PhD in network analysis and sharing behavior on Twitter

4/2014 – 12/2015 Master Thesis preparation at **Center for Micro-BioRobotics** (Italian Istitute of Thechnology) in Pontedera (Pisa), Italy

Publication **F.Bosia, S.Colella, V.Mattoli, B.Mazzolai and N. M. Pugno. 2014.**
Hierarchical multiple peeling simulations. **RSC Adv. 4:25447-25452.**
Impact Factor: 3.84
DOI:http://dx.doi.org/10.1039/C4RA03459G

Teaching

1 – 2/2014 **Laboratory assistant**, *Università degli Studi di Torino*, Turin, Italy.
Laboratory assistant for a course in basic physics (held by Professor Nicola Carlo Amapane) at the Biotechnology Department

10 – 12/2013 **Tutor**, *Università degli Studi di Torino*, Turin, Italy.
Tutoring for a basic informatics course (held by Professor Stefano Berardi) at Physics Department

Work Experience

5 – 10/2016 **Consultant**, *Software house APL italiana*, Milan, Italy.
Solving problems of the clients, employees of insurance companies, with the use of the program SOFIA

Computer skills

Programming languages

Basic C, C#, C++

Intermediate Python, Matlab

Programs

Advanced LaTeX, Comsol, Mathematica and Office (Excel, World, Power-Point)

ECDL (European Computer Driving Licence)

Languages

Italian Mother tongue

English Fluent in reading, writing and speaking. *First Certificate in English (FCE) with grade A*

French, German Basic

Other interests

- Violin (I played it for 7 years)
- Soccer (goal keeper)
- Comics and books
- Dancing tango
- Roller skating

Voluntary work

2007 – 2010 Children's entertainer (group leader) at the parish *San Leonardo Murialdo* in Turin