Valentina Baruzzi

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Summary

I'm a Ph.D. student at COMPSYS - Complex systems: models and nonlinear circuits – University of Genoa, Italy. My main research interest is Nonlinear Dynamics, with an emphasis on design methods for Central Pattern Generator networks.

Work Experience

March 2020 to today	**Teaching assistant** University of Genoa "Circuit Theory" and "Analog and Digital Filters" classes
March 2020 to today	**Teaching tutor** University of Genoa organizational and support activities and English course tutoring
October-November 2017 October-November 2018	**Scientific entertainer** Festival of Science – Genoa (http://www.festivalscienza.it)

Education

November 2019 to today	**Ph.D. student in Science and Technology for Electrical Engineering and Complex System for Mobility. Curriculum: Electrical Engineering** University of Genoa, Italy Supervisor: Prof. Marco Storace, University of Genoa	
September 2017 to October 2019	**Master's degree in Bioengineering, Neuroengineering curriculum** University of Genoa, Italy Master's thesis: "Implementation of Silicon Neurons with Gabor-like Receptive Fields on Neuromorphic Device Using Recurrent Clustered Inhibition" Institute of Neuroinformatics UZH-ETH, Zurich	110 cum laude
September 2017 to July 2020	**Student of the Science and Technologies for Information Society Specialization (STSI), Second Level** IANUA-ISSUGE, Institute of Advanced Studies of the University of Genoa Admission is based on merit, a written test, and an oral interview and is reserved for master's degree students. Bioengineering students are required a grade-point average over 29.4/30 or to graduate cum laude at the end of the two years course. Relevant subjects of study: industry 4.0, Internet of Things, soft skills, management	

September 2014 to September 2017	**Bachelor's degree in Biomedical Engineering**	110 cum laude
	University of Genoa, Italy	
	Bachelor thesis: "Study and Transfer of Human Motion Kinematics to the Humanoid Robot iCub"	
	IIT (Italian Institute of Technologies)	
September 2014 to September 2017	**Educational program "Higher Education in ICT e Management", First Level**	
	Institute of Advanced Studies in Information and Communication Technologies (ISICT), now STSI in IANUA-ISSUGE	
	Winner of a 3 years scholarship. Admission is based on merit, a written test, and an oral interview. The minimum requirement is a grade-point average over 27/30. The program creates a link between the academic world and industries; it consists of more than 100 hours per year of lessons about innovative or managerial subjects, provided by professors and industries leader in ICT. Relevant subjects of study: Effective Communication, National and International contract law, Business plan, Cybersecurity	

Skills

Languages	• Italian (native speaker) • English • Spanish
Technical skills	• Matlab (used daily) • Python • C++ (basic knowledge)
Soft skills	• Communication • Analytical thinking • Problem solving • Teamwork • Adaptability Acquired during my Ph.D research activities and during previous and current work experiences
Driving license	• B

Additional information

| **Publications** | • Baruzzi, V., Lodi, Oliveri, A., M., Storace. (2021). Analysis and Improvement of an Algorithm for the online Inertia Estimation in Power Grids with RES. Accepted in In ISCAS2021.
• Baruzzi, V., Lodi, M., Storace, M., & Shilnikov, A. (2020). Generalized half-center oscillators with short-term synaptic plasticity. Phys. Rev. E, 102:032406.
• Baruzzi, V., Indiveri, G., & Sabatini, S. P. (2020). Compact Early Vision Signal Analyzers in Neuromorphic Technology. In VISIGRAPP (4: VISAPP) (pp. 530-537).
• Baruzzi, V., Indiveri, G., & Sabatini, S. P. (2020). Emergence of Gabor-Like Receptive Fields in a Recurrent Network of Mixed-Signal Silicon Neurons. In ISCAS2020. |