# Valentina Gregori

## Curriculum Vitae

#### Personal Information

Birthday 10 October 1991, Viterbo (VT)

Address Via G. A. Molfino, 7/34, Genoa (GE), Italy

Nationality Italian

Mobile (+39) 347 4954921 Email gregori.vale@gmail.com

#### Interests

- Meteorology and oceanography
- Remote sensing of the atmosphere
- Applied machine learning

### Education

11/2019-10/2020 Postgraduate Master (second level) in Meteorology and Oceanography

University of Salento in collaboration with University Parthenope of Naples

09/2016-02/2020 Ph.D. in Engineering in Computer Science

"La Sapienza" University of Rome, Department of Computer Control and Management Engineering in collaboration with the Italian Institute of Technology (IIT)

Thesis An analysis of the visuomotor behavior of upper limb amputees to improve prosthetic

control (https://iris.uniroma1.it/handle/11573/1373581)

Supervisor Prof. Barbara Caputo

Description My main research focused on the analysis and processing of electromyographic

signals, eye tracking data and visual data acquired both from amputated and intact subjects. I applied machine learning techniques to automatically analyze, interpret and classify these data with the goal to improve the control of upper limb prostheses.

12/2013-04/2016 Master's Degree in Theoretical Physics (110/110 cum laude)

"La Sapienza" University of Rome, Department of Physics

09/2010-12/2013 Bachelor's Degree in Physics (105/110)

"La Sapienza" University of Rome, Department of Physics

## Computer Skills

Programming Programming in Python (good) and its scientific computing packages (numpy,

matplotlib, scipy), Matlab (basic). Basic experience with packages designed for

deep learning (pytorch) and computer vision (OpenCV, PIL).

Software Ocean Data View (basic)

General Document and presentation formatting with LaTEX and Office, experience with Linux

(daily) and Windows (regularly).

## Languages

Italian Mothertongue

English Fluent

#### General Information

Driving License B

Personal Interests Reading, cloud spotting (member #47201 of the Cloud Appreciation Society)

#### Publications

- 1. V. Gregori, A. Gijsberts, and B. Caputo, "Adaptive Learning to Speed-Up Control of Prosthetic Hands: a Few Things Everybody Should Know," 2017 IEEE 15th International Conference on Rehabilitation Robotics (ICORR).
- 2. F. Giordaniello, M. Cognolato, M. Graziani, A. Gijsberts, V. Gregori, G. Saetta, A. G. Mittaz Hager, C. Tiengo, F. Bassetto, P. Brugger, B. Caputo, H. Müller, and M. Atzori, "Megane Pro: myo-electricity, visual and gaze tracking data acquisitions to improve hand prosthetics," 2017 IEEE 15th International Conference on Rehabilitation Robotics (ICORR).
- 3. A. Gigli, V. Gregori, M. Cognolato, M. Atzori, B. Caputo, and A. Gijsberts, "Visual Cues to Improve Myoelectric Control of Upper Limb Prostheses," 2018 IEEE 7th International Conference on Biomedical Robotics and Biomechatronics (BioRob).
- 4. V. Gregori, B. Caputo, and A. Gijsberts, "The Difficulty of Recognizing Grasps from sEMG during Activities of Daily Living," 2018 IEEE 7th International Conference on Biomedical Robotics and Biomechatronics (BioRob).
- 5. V. Gregori, M. Cognolato, G. Saetta, M. Atzori, The MeganePro Consortium, and A. Gijsberts, "On the Visuomotor Behavior of Amputees and Able-Bodied People During Grasping," 2019 Frontiers in Bioengineering and Biotechnology 7, p. 316.
- M. Cognolato, A. Gijsberts, V. Gregori, G. Saetta, K. Giacomino, A. G. Mittaz Hager, A. Gigli, D. Faccio, C. Tiengo, F. Bassetto, B. Caputo, P. Brugger, M. Atzori, and H. Müller, "Gaze, Visual, Myoelectric, and Inertial Data of Grasps for Intelligent Prosthetics" 2020 Scientific Data 7, p. 43.