

## CURRICULUM VITAE

### PERSONAL INFORMATIONS

Name	<b>D'ORSI LAURA</b>
Address	<b>Largo Ines Bedeschi 5, 00166, Roma, Italia</b>
Telephon number	<b>066147229 – Cel. 3396503815</b>
E-mail	<b>dorsi.laura@gmail.com</b>
Place and date of birth	<b>ROME, 10.03.1987</b>

### EDUCATION AND TRAINING

- Qualifications Ph.D. in course, in Automatic and Operational Research at DIAG, Department of Computer, Automation and Management Engineering "A. Ruberti ", La Sapienza University of Rome, via Ariosto 25;

*Master's Degree in Biomedical Engineering achieved in December 2012 with 110/110, La Sapienza University of Rome; thesis title: "Image analysis of liver tissue: segmentation with level-set and classification by support vector machine"*

*Beachelor degree in Clinical Engineering, obtained in July 2010 with 103/110, La Sapienza University of Rome; thesis title: "PID control of a diabetes model: Adjusting blood glucose concentration"*

*Scientific high school diploma, with 100/100, obtained in 2006, Liceo Scientifico Evangelista Torricelli in Rome.*

- Qualification achieved Biomedical engineer

Enrollment in the Register of Engineers of the Province of Rome, completed in September 2013

### INDUSTRIAL EXPERIENCE

- Date (from – to) October 2006 – July 2017
- Name and address of the employer B&D Servizi  
Rome, via di Montespaccato 15
- Type of business or sector Services company
  - Main tasks
    - Call center for web marcheting
    - Idealization and realization of advertising banners
    - Design and implementation of web site
  
- Date (from – to) February 2012 – June 2012
- Name and address of the employer Istituto Superiore di Sanità Roma, Viale Regina Elena, 299

- Main tasks Digital imaging of DICOM images with the purpose to obtaining a three-dimensional model of particular anatomic districts (aortic arch).
  
- Date (from – to) April 2013 – December 2014
- Name and address of the employer DIAG, Department of Computer, Automation and Management Engineering "A. Ruberti ", La Sapienza University of Rome, via Ariosto 25
- Main tasks Collaboration contract; analysis of liver tissue images: realization of algorithms for automatic image segmentation by means of the Support Vector Machine.  
PHD study: processing and classification of electroencephalographic signals for the development of Human-Computer interaction devices.
- Publications **SVM based pattern recognition of microscopic liver images**, Silvia Canale, Laura D'Orsi, Daniela Iacoviello, *VIP IMAGE 2013 IV, ecomas thematic conference on computational vision and medical image processing 14-16 October 2013, Madeira Island, Portugal.*
  
- Date (from – to) June 2013 – September 2013 / October 2016
- Name and address of the employer National Research Council, Institute of Systems Analysis and Computer Science "A. Ruberti ", Laboratory of Biomathematics, Largo Agostino Gemelli 8, Rome
- Main tasks Physiological model of stochastic differential equations with delay describing the mechanism of cerebral auto-regulation. Model implementation, high parameter estimation, stability study.  
Physiological model of respiratory system and patient-ventilator interaction.
- Publications **Empirical modeling of cerebral autoregulation**, Simona Panunzi, Laura D'Orsi, Daniela Iacoviello, Andrea De Gaetano, *I-WISH 2013, The International Workshop on Innovative Simulation for Healthcare 25 - 27 September 2013, Royal Olympic, Athens, Greece.*  
  
**A stochastic delay differential model of cerebral autoregulation**, Simona Panunzi, Laura D'Orsi, Daniela Iacoviello, Andrea De Gaetano, *PlosOne*, April 1, 2015 1:10(4).  
  
**Modelling the ventilator-patient interaction: a pressure-cycled control strategy**, Laura D'Orsi, Alessandro Borri, Andrea De Gaetano, *56th IEEE Conference on Decision and Control, Melbourne, Australia, December 12-15 2017*
  
- Date (from – to) October 2015 – September 2016
- Name and address of the employer National Research Council, Institute of Systems Analysis and Computer Science "A. Ruberti ", Via dei Taurini 19, Rome
- Main tasks Analysis of a ceRNA-miRNA interaction model: search for optimal parameters.  
Modeling patient-ventilator interaction.

## MAIN COURSES FOLLOWED

*Training course for first aid workers and management of health emergencies related to Group B companies in accordance with D.M. No 388 of 15/07/2003 and D. Lgs n. 81/2008*

*Training course for fire prevention, fire fighting and emergency management for activities at low fire risk*

*Numerous seminars in the field of automation and biomedical engineering courses followed during the PhD course*