

# Europass Curriculum Vitae

## Personal information

First name(s) / Surname(s) **Laura Galassi**

## Desired employment / Occupational field

**Biorobotic engineering**

## Work experience

Dates	From October 2023 – in process
Occupation or position held	PhD Scholarship
Main activities and responsibilities	Research activities for the development of a soft artificial heart ventricle, in the field of artificial organs and implantable devices. The focus of the research interests lies in the coupling between soft robotics and biomedical applications. The main activities are focused on the development of soft technologies, which have the potential to overcome the limitations of traditional robotics, ensuring a safe interaction with humans, greater biocompatibility, and the ability to mimic physiological motions and tissues.
Name and address of employer	Soft Mechatronics for Biorobotics Laboratory – BioRobotics Institute, Scuola Superiore Sant'Anna
Type of business or sector	Research
Dates	From June 2023 to August 2023
Occupation or position held	Research Scholarship
Main activities and responsibilities	Design and fabrication of a soft actuation system for an artificial soft bladder
Name and address of employer	Surgical Robotics Laboratory – Biorobotics Institute, Scuola Superiore Sant'anna
Type of business or sector	Research
Dates	From November 2022 to February 2023
Occupation or position held	Intern Student
Main activities and responsibilities	Master Thesis Project: Design of a soft actuation system based on mechanical instability for an artificial heart ventricle
Name and address of employer	Soft Robotic Matter Laboratory - AMOLF, Science Park 104, 1098 XG Amsterdam, The Netherlands
Type of business or sector	Research
Dates	From December 2021 to May 2022
Occupation or position held	Lab Training
Main activities and responsibilities	Design and characterization of a novel soft pneumatic artificial muscle that integrates an implantable bellows
Name and address of employer	Soft Mechatronics for Biorobotics Laboratory – Scuola Superiore Sant'Anna, Pisa
Type of business or sector	Research
Dates	From August 2021 to September 2021
Occupation or position held	Intern in a Traineeship
Main activities and responsibilities	Biomedical Engineering Research: develop and train a machine learning algorithm, based on deep neural network, for electrocardiogram delineation
Name and address of employer	Medical university of Vienna, Spitalgasse 23, Wien, Austria
Type of business or sector	Research
Dates	Since 2016 to 2021
Occupation or position held	Private lessons and tutoring
Main activities and responsibilities	High School level lesson of physics, mathematics, geometry and science
Name and address of employer	Private citizen
Type of business or sector	Education
Dates	Summer 2015 and 2020
Occupation or position held	Baby-sitting
Main activities and responsa abilities	Taking care of children from 3 to 9 years old

Name and address of employer	Private citizen
Type of business or sector	Education
<b>Education and training</b>	
Dates	From October 2020 to April 2023
Title of qualification	Master's Degree in Bionics Engineering
Principal subjects/occupational skills covered	Most advanced robotics and bioengineering technologies with life sciences, such as medicine and neuroscience, materials science, etc., with the ultimate goal of inventing and deploying a new generation of biomimetic machines, human-centred healthcare and assistive technologies. The biorobotics curriculum is focused on the development of humanoid and animaloid robot models, wearable robots, bionic implantable organs, artificial upper and lower limbs, robots and platforms for diagnosis, surgery and rehabilitation, computational biomechanics, micro/nano-robots and biomaterials. The curriculum's subjects are reported below. Principles of bionics engineering, statistical signal processing, neuromorphic engineering, biomechanics of human motion, bioinspired computational methods (neural and fuzzy computation, biological data mining), applied brain science (behavioural and cognitive neuroscience, computational neuroscience), materials and instrumentation for bionics engineering (instrumentation and measurement for bionic systems, soft and smart materials), human and animal models in biorobotics, robotics for assisted living (robot companions for assisted living, cloud robotics), wearable robotics (exoskeletons, prostheses), robotics for surgery and targeted therapy (robotics for minimally invasive therapy micro/nano robotics and biomaterials).
Name and type of organisation providing education and training	Scuola Superiore Sant'Anna and Università di Pisa
Level in national or international classification	Master degree with 110/110 cum laude
Dates	From October 2017 to July 2020
Title of qualification awarded	Bachelor's Degree in Biomedical Engineering
Principal subjects/occupational skills covered	Typical engineering requirements (as Mathematical Analysis, Physics, Electronic, Electrotechnics, Mechanics) and skills applied to the biomedical field
Name and type of organisation providing education and training	Università Politecnica delle Marche
Level in national or international classification	Bachelor with 110/110 cum laude
Dates	From September 2012 to June 2017
Title of qualification awarded	High School Diploma
Principal subjects/occupational skills covered	Mathematics, Physics, Italian, Latin, English, History, Philosophy, Science
Name and type of organisation providing education and training	Liceo scientifico Leonardo da Vinci, Civitanova Marche
Level in national or international classification	"Esame di stato", final mark 100/100
Dates	From September 2009 to June 2012
Title of qualification awarded	Secondary School Diploma
Principal subjects/occupational skills covered	Italian, Mathematics, English, French, Science, Art, Music, Technical Education
Name and type of organisation providing education and training	Istituto Comprensivo Raffaello Sanzio, Porto Potenza Picena

Level in national or international classification | Final mark 10/10 cum laude

## Personal skills and competences

Mother tongue(s) | **Italian**

Other language(s)

Self-assessment

European level (\*)

**Language**

**Language**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
5.5	English	6	English	6	English	6	English	5.5	English
A2	French	A2	French	A2	French	A2	French	A2	French

(\*) [Common European Framework of Reference for Languages](#)

IELTS, Academic, British Council, Cambridge Assessment English, Level B2, 12 September 2020

Cambridge English Entry Level Certificate in ESOL International (Entry 3), Council of Europe Level B1, March 2016

Ardmore Language Schools Diploma CEF level B2, attending a 30 hour English Language Course at an Ardmore Language School in Kingswood School, Bath from 23 July to 6 August 2014

Cambridge ESOL Entry Level Certificate in ESOL International (Entry 2), Council of Europe Level A2, May 2012

Diplôme d'études en langue française DELF A2, May 2012

Social skills and competences

Group working and sharing views. Critical thinking for the accomplishment common goals. Volunteer educator for social services.

Organisational skills and competences

Organizing appointments and scheduling meetings, creating and keeping deadlines, setting and meeting goals, managing team and project, problem solving skills.

Technical and Computer skills and competences

ECDL Base and ECDL Full Standard Certificate in May 2015. Proficient user of computer software (specifically Microsoft Office).

Proficient user of Matlab; C, C++, Python programming language knowledge; YARP, ROS, Weka, LabView, Ansys, SOLIDWORKS user.

Driving licence

B licence

## Additional Information

Publications

**Galassi, L.**, Lorenzon, L., & Cianchetti, M. (2024, June). Inverse pneumatic artificial muscles with implantable vascular graft. In *ACTUATOR 2024; International Conference and Exhibition on New Actuator Systems and Applications* (pp. 256-259). VDE.

**Galassi, L.**, Paternò, L., Semproni, F., Onorati, S., Iacovacci, V., & Menciassi, A. (2024, April). A Soft Robotic Detrusor Based on Balloon Hydraulic Actuators for Artificial Bladder Voiding. In *2024 IEEE 7th International Conference on Soft Robotics (RoboSoft)* (pp. 609-614). IEEE.

Haberbusch, M., Bernardo, L. A., **Galassi, L.**, Oddo, C. M., & Moscato, F. (2022). Electrocardiogram Delineation Using Deep Neural Networks. In *dHealth 2022* (pp. 117-118). IOS Press.

In accordance with the Italian Legislative Decree no. 196/2003 on Personal Data Protection

Date 19/02/2025