## PERSONAL INFORMATION

# Claudia Presicci

Gender | Date of birth 9 February 1996 | Nationality

## WORK EXPERIENCE

**Nov 2022 – Present**

### Industrial Ph.D. Student

Institute for Robotics and Intelligent Machines
University of Genoa – Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)
SWHARD s.r.l.

Study and development of a highly ergonomic wearable device for movement and posture assessment in rehabilitation, work, and sports

Business or sector   Healthcare and wellness

**Feb 2023 – June 2023**

### Teaching support

University of Genoa – Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)
Centro di Simulazione e Formazione Avanzata (SIMAV)

– Design and development of embedded systems for biomedical applications based on Arduino and ultrasonic sensors, potentiometers and force sensing resistors.
– Design and development of virtual environments in Unity for biomedical applications.

Business or sector   Medical simulation, Biomedical Engineering (L-8)

**March 2021 – Oct 2022**

### Postgraduate Research Grant

Consiglio Nazionale delle Ricerche – Istituto di iNgegneria del Mare (CNR – INM)

– Blue robotics for sustainable eco-friendly services aimed at innovative marinas & leisure boats (Blue RoSES)
– Smart technology for MArinE Litter SusTainable RemOval and Management (MAELSTROM)

Business or sector   Software developer (Computer Vision, ROV)

**Sept 2018 – Feb 2019**

### Laboratory activities

University of Genoa – Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Collaboration activities (100h)

## EDUCATION AND TRAINING

| | |
|---|---|
| Sept 2017– Dec 2020 | **Master Degree in Neuroengineering and bio-ICT**    ISCED 7 |

University of Genoa – Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

**Principal subjects/occupational skills covered**

Analysis of Biomedical data and signals
Biomedical instrumentation and bioimaging
Molecular, cellular and tissue engineering
Motor control and human performance assessment
Neuroengineering and neurotechnologies
Perceptual systems and interaction
Biomedical robotics
Computational neuroscience
Graphical programming for measurement and control
Neuromorphic computing and integrative cognitive systems
Project: Wearable posture control system with Arduino

**Thesis**    A wearable vibrotactile system for obstacles detection and avoidance based on stereo tracking camera

Final Grade    110/110

| | |
|---|---|
| Jan 2019 | **Certified LabVIEW Associate Developer (CLAD)** |

National Instruments

Score    92.5/100

| | |
|---|---|
| Oct 2014– Dec 2017 | **Bachelor Degree in Biomedical Engineering**    ISCED 6 |

University of Cagliari

**Principal subjects/occupational skills covered**

Analysis of Biomedical data and signals
Mechanical bioengineering
Biomaterials
Chemistry and biochemistry
Anatomy and physiology
Bioelectronic interfaces
Biosensors
Electromedical devices
Bioinformatics
Electronic signal processing
Electronic design
Automatic controls
Device electronics
Project: Peak detector for ECG signals in Matlab

**Thesis**    Inkjet Printed OCMFET as DNA hybridisation sensor

Final Grade    110/110

| | |
|---|---|
| Sept 208 – June 2014 | **Scientific High School Diploma**    ISCED 3 |

Liceo Scientifico Statale "Antonio Pacinotti" Cagliari

Final Grade    100/100

| | |
|---|---|
| Nov 2010 | **Certificate of course completion**    CompTIA A+ 220-801 and 220-802, and EUCIP |

Cisco Networking Academy

IT Essential: PC Hardware and Software

## PERSONAL SKILLS

| Mother tongue | Italian |

### Other languages

| UNDERSTANDING | | SPEAKING | | WRITING |
|---|---|---|---|---|
| Listening | Reading | Spoken interaction | Spoken production | |
| B2 | B2 | B2 | B2 | B2 |
| First Certificate in English (University of Cambridge ESOL) B2 | | | | |

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

**Social skills and competences**
– Teamwork
– Team management
– Active listening

**Organisational skills and competences**
– Project management
– Problem solving
– Strategic thinking
– Implementing strategy
– Assessment and evaluation
– Developmental planning
– Responsibility for office materials and equipment

### Digital competences

| SELF-ASSESSMENT | | | | |
|---|---|---|---|---|
| Information Processing | Communication | Content creation | Safety | Problem solving |
| Proficient user | Proficient user | Proficient user | Proficient user | Proficient user |

Digital competences - Self-assessment grid

**Technical skills and competences**
– Electrophysiological Signal Analysis (ECG, EMG, EEG, Spike trains and Burst)
– Neural Network Models, Neural Interfaces, Brain-Machine Interfaces
– Data Analysis (PCA, FA, ICA, Cluster Analysis, Decision Theory, Classifier Algorithms, Bayesian Models)
– Neuromechanics Models and Analysis (Kinematics, Dynamics and Sensorymotor Integration)
– Perceptive Systems Models and Technologies (Vision and Auditory System, Somesthetic Senses: Psycophysics Foundations and Neuromorphic Computational Processes)

**Computer skills and competences**
– Image and Signal Processing (MATLAB, LabVIEW, OpenCV)
– Computer Vision and Runtime Analysis
– Programming (Python, Arduino, C++, C#, Qt Quick, Unity, Flutter, Zephyr RTOS)
– MS Office (Word, Excel, Access, PowerPoint)

## PUBLICATIONS

[1] A. Odetti, E. Spirandelli, M. Bibuli, and **C. Presicci**. *Sushi Drop SUstainable fiSHeries wIth DROnes data Processing: Manuale Tecnico di Uso e Manutenzione.* Tech. rep. Consiglio Nazionale delle Ricerche, 2021. URL: https://publications.cnr.it/doc/460719.

[2] M. Bibuli, A. Odetti, M. Caccia, **C. Presicci**, R. Ferretti, and S. Aracri. "Networked Robots and IoT: Real Time Data Acquisition at its Finest". In: *21st International Conference on Computer and IT Applications in the Maritime Industries.* 2022, pp. 120–130. URL: http://data.hiper-conf.info/compit2022_pontignano.pdf.

[3]   M. Bibuli, M. Caccia, **C. Presicci**, L. Sebastiao, D. Cabecinhas, A. Potes, J Quintas, M. Jacinto, and A. Pascoal. "The Blue-RoSES Project: a Gate for Remote Exploration of the Seas". In: *IFAC-PapersOnLine* 56.2 (2023). 22nd IFAC World Congress, pp. 5723–5728. URL: https://www.sciencedirect.com/science/article/pii/S2405896323008881.