

UNIVERSITA' DEGLI STUDI DI GENOVA

AREA RICERCA, TRASFERIMENTO TECNOLOGICO E TERZA MISSIONE

SERVIZIO RICERCA

SETTORE RICERCA NAZIONALE

IL RETTORE

- Visto il Decreto Rettorale n.6199 del 11/12/2024 con il quale viene indetto il concorso, per titoli e colloquio per il conferimento di una borsa di ricerca post laurea, di tipo starting della durata di 12 mesi, dell'importo di € 15.000,00 euro (quindicimila/00), eventualmente rinnovabile, per lo svolgimento di una ricerca sul tema "How do surgeons learn? Toward personalized robotic-assisted laparoscopy training based on high-density electroencephalography", presso il DIBRIS dell'Università degli Studi di Genova.
- Visto il Decreto Rettorale n. 60 del 09/01/2025 con il quale è stata costituita la Commissione giudicatrice per il conferimento della suddetta borsa di ricerca;
- Visto il verbale della Commissione giudicatrice del concorso in parola, riunitasi in data 13/01/2025;
- Constatata la regolarità della procedura seguita;

DECRETA

Art. 1

Sono approvati gli atti del concorso di cui in premessa e la seguente graduatoria di merito:

1. Dott.ssa Anna Caleffi	punti 82/100
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Sotto condizione dell'accertamento dei requisiti di cui al bando, è dichiarata vincitrice del concorso in parola la Dott.ssa Anna Caleffi.

Genova,

IL RETTORE

(firmato digitalmente)



Anna Caleffi

EDUCATION AND TRAINING

Master Student in Bioengineering

University of Genoa [09/2022 – 20/12/2024]

City: Genoa | Country: Italy | Final grade: 109 | Thesis: PREPAR3 – Virtual Reality in Preoperative Planning: a Preliminary Study in Uro-Oncology and Spine Surgery

Bachelor's Degree in Biomedical Engineering

University of Padova [10/2018 – 03/2022]

City: Padova | Country: Italy | Final grade: 90/110 | Thesis: In situ bioprinting: applicazioni attuali e prospettive future

Diploma from Scientific High School

Don Bosco [09/2013 – 07/2018]

City: Verona | Country: Italy

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Python / C# / MatLab / Unity 3D / 3DSlicer / Arduino / Blender

CONFERENCES AND SEMINARS

SIMMED 2024: Italian Society for Simulation in Medicine National Congress

CULTURAL EXPERIENCE

[07/2016]

Alternanza Scuola-Lavoro

Completed a one-month internship at the Max Planck Institute of Chemistry in Mainz, Germany. Gained hands-on experience analyzing the health effects of particulate matter on humans.

[08/2017]

Alternanza Scuola-Lavoro

Volunteered for three weeks in a group home in Chisinau (Moldova), assisting children with homework.

[03/2022 – 08/2022]

LSI Education

Intensive English course in Toronto (Canada)

PUBLICATIONS

[2019]

[Long-term concentrations of fine particulate matter and impact on human health in Verona, Italy](#)

Pozzer, A., Bacer, S., Sappadina, S. D. Z., Predicatori, F., & Caleffi, A. (2019). Atmospheric Pollution Research, 10(3), 731-738.

PROJECTS

[02/2023]

Recognition of digits from handwriting samples

Developed an automatic digit recognition system for handwriting samples using various classification algorithms.

[2023]

Sensorimotor Adaptation Experiment

Planned, recorded, and analyzed hand trajectory adaptations in an experiment using a manipulandum robot, which generated various types of perturbations.

[2024]

Biomechanical Analysis of Three Karate Movements

Conducted marker-based motion analysis of three karate movements using the Vicon Optoelectronics System.

[2024]

Design and Development of WalkWell Ankle

Created a wearable device to assist Parkinson's disease patients. The ankle integrates an Arduino, two IMU sensors, and a vibrating motor. Using a Kalman filter with a Zero Velocity Update Algorithm, it tracks speed and trajectory, detects Freezing of Gait episodes, and provides corrective vibrations. Data is transmitted to a server via Mosquito MQTT for remote monitoring.

[2024]

Body Machine Interface for Powered Wheelchair control

Evaluated linear and nonlinear dimensionality reduction methods, including Principal Component Analysis (PCA) and Autoencoders, for powered wheelchair control in healthy subjects.

[2024]

Binary Classification Problem on Genomic Data

Performed binary classification on an extract of The Cancer Genome Atlas dataset using Lasso regression and Support Vector Machines (SVM).