Alessia Gerbasi

Date of Birth: 18.05.1996

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https://scholar.google.si/citations?user=zzZZp_UAAAAJ&hl=en

Education

10/2020 – **Ph.D., University of Pavia** Bioengineering, Bioinformatics and Health Technologies.
Thesis Topic: *Explainable AI pipelines for medical image analysis*
Supervisors: Prof. Riccardo Bellazzi, Prof. Silvana Quaglini

10/2018 – 9/2020 **M.Sc. Biomedical Engineering, University of Pavia**
Thesis title: *Eye-tracking features design for early detection of mild cognitive impairment and cervical dystonia*
Supervisors: Prof. Lucia Sacchi, Prof. Aleksander Sadikov, Prof. Dejan Georgiev
Final mark: 110/110 with honors

10/2015 – 9/2018 **B.Sc. Biomedical Engineering, University of Pavia**
Thesis title: *Identification of metabolic multi-models for type 1 diabetic patients*
Supervisor: Prof. Chiara Toffanin, Prof. Lalo Magni
Final mark: 107/110

9/2010 – 7/2015 **Scientific High School**
Liceo Scientifico Filolao, Crotone, Italy

Skills

Languages — Italian (Native), English (Fluent), Spanish (Basic)

Coding — Python, C, R, SQL, Matlab, Pearl

Python Frameworks — Pytorch, Numpy, Pandas, Matplotlib, Scikit-Learn, ITK

Interests — Computer Vision, Deep Learning, Image Processing, Neural Networks, Data Analysis, Explainable AI, Medical Imaging

Experiences

International Experiences

3/2022 – 8/2022 **Visiting Ph.D. student at Amsterdam University Medical Centers (UMC), Amsterdam**
Research intern at Biomedical Engineering and Physics department.
Machine learning based pipeline for the identification of novel imaging prognostic biomarkers in patients with acute ischemic stroke.
Supervisor: Prof. Henk Marquering.

3/2020 – 9/2020 **Visiting M.Sc. Student at University of Ljubljana, Slovenia**
Research intern at Artificial Intelligence Laboratory
Supervisor: Prof. Aleksander Sadikov.

Schools and certifications

09/2021 **VisMac2021: MAChine VISion**.
CVPL and University of Palermo

XL Annual School in Bioengineering.
GNB - Italian National Bioengineering Group

Radiomics toolbox: Workflow and quality management.
University of Pavia & Fondazione Mondino IRCCS

Experiences (continued)

05/2021 — **HL7 FHIR Foundamentals Course**.
HL7 ITALIA

02/2021 — **AI for Medicine**.
DeepLearning.AI

12/2018 — **Machine and Deep Learning for Neurological Diseases**.
University of Pavia & Fondazione Mondino IRCCS

29/06/2015 — **Cambridge English Level 1 Certificate ESOL International (First)**.
University of Cambridge

24/05/2013 — **C1 EFFECTIVE OPERATIONAL PROFICIENCY**.
ESOL CERTIFICATE - British Institutes

Work Experiences

09/2017 - — **Academic Tutor of Medical Informatics**.
University of Pavia

09/2021 - 12/2021 — **CINECA engineering expert**.
CINECA, Italy

Volunteering

01/2012 - 2016 — **AGESCI Scouting Group**.
Crotone, Italy

Piccoli Passi Onlus.
Crotone, Italy

On the Road Onlus.
Crotone, Italy

01/2021 - — **Red Cross**.
Pavia, Italy

Research Publications

- **Gerbasi, A.**, Clementi, G., Corsi, F., Albasini, S., Malovini, A., Quaglini, S., & Bellazzi, R. (2022). Deepmica: Automatic segmentation and classification of breast microcalcifications from mammograms. *SSRN preprint*.
- Bernini, S., **Gerbasi, A.**, Panzarasa, S., Quaglini, S., Cotta, R. M., Costa, A., … Bottiroli, S. (2022). Outcomes of a computer-based cognitive training (core) in early phases of cognitive decline: A data-driven cluster analysis. *Scientific Reports*.
- **Gerbasi, A.**, Konduri, P., Tolhuisen, M., Cavalcante, F., Rinkel, L., Kappelhof, M., … Marquering, H. (2022). Prognostic value of combined t2-flair and dwi follow-up imaging features in acute ischemic stroke. *Journal of Cardiovascular Development and Disease*.
- Bortolotto, C., Stella, G. M., Messana, G., Lo Tito, A., Podrecca, C., Nicora, G., … Grimm, R. et al. (2022). Correlation between pd-l1 expression of non-small cell lung cancer and data from ivim-dwi acquired during magnetic resonance of the thorax: Preliminary results. *Cancers*, *14*(22), 5634.
- Bellazzi, R., & **Gerbasi, A.** (2022). Fundamentals of artificial intelligence: From major successful applications to outstanding challenges in the medical field. In *50-th sirm congress - track: Artificial intelligence in radiology*.
- **Gerbasi, A.**, Groznik, V., Georgiev, D., Sacchi, L., & Sadikov, A. (2021). Detecting mild cognitive impairment using smooth pursuit and a modified corsi task. In *International conference on artificial intelligence in medicine* (pp. 168–172). Springer.