

Alberto Antonio Romano

Curriculum Vitae

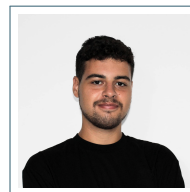
pursuant to Articles 46 and 47 of Presidential Decree 445/2000

Department of Computer Science

University of Bari, 6th Floor

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🐙 Github in LinkedIn



Education

- Sep 2025 – **Master's Degree in Computer Science - AI Curriculum (LM-18)**, *University of Bari Aldo Moro*, Via E. Orabona, 4, 70125, Bari, Italy.
Ongoing
- Sep 2022 – **Bachelor's Degree in Computer Science (L-31)**, *University of Bari Aldo Moro*, Via E. Orabona, 4, 70125, Bari, Italy.
Jul 2025
Final grade: 110 cum laude with honorable mention/110
Main skills acquired: Python programming, C programming, Java programming, web programming fundamentals, database fundamentals, version control with Git, software testing, experimental protocol design, biometric data processing.
- Sep 2017 – **Scientific High School Diploma**, *Licei Cartesio*, Via Don Vitangelo Dattoli, 1, 70019 Triggiano (BA), Italy.
Jul 2022
Final grade: 100 cum laude/100

Professional Experience

- May 2026 – **Research Fellow**, *Department of Computer Science, University of Bari Aldo Moro*, Bari, Italy.
Present
Study and research grant (D.R. no. 1722, 22.05.2026) within the PNRR PNC DARE project on the topic "A multimodal approach with non-invasive biometric sensors for the assessment of cognitive load and psychophysiological responses".
 - Development of multimodal systems for the collection and analysis of non-invasive biometric signals (EEG, EDA, HRV, eye-tracking).
 - Assessment of cognitive load and psychophysiological responses through controlled experimental protocols.
- Oct 2025 – **Research Assistant**, *Peopleware AI – Department of Computer Science, University of Bari Aldo Moro*, Bari, Italy.
May 2026
Research activity within the study of the psychophysiological effects of AI-based coding assistants during programming tasks.
 - Collection of biometric data through EEG, EDA, HRV and eye-tracking devices.
 - Investigation of the relationship between the use of AI coding assistants and physiological response during software development tasks.
 - Contribution to the statistical analysis and evaluation of cognitive load metrics during programming.
 - Design and conduct of multi-site experimental protocols, from setup to data collection and debriefing.

Relevant Projects

- 2025 **Multi-site study on the psychophysiological effects of AI-assisted programming.**
Experimental research project aimed at investigating the impact of AI-based coding assistants on the physiological and cognitive responses of programmers.
 - Design and conduct of multi-site experimental protocols with biometric data collection (EEG, EDA, HRV, eye-tracking).
 - Management of the entire experimental cycle: setup, data collection and participant debriefing.
 - Statistical analysis of the collected data and evaluation of cognitive load metrics.

Publications

- 2025 A. A. Romano. *An experimental protocol for the evaluation of the impact of AI-based code assistants on software development*. Bachelor's Thesis, University of Bari Aldo Moro, 2025.
- 2025 N. B. Koch, T. H. Stensgaard, P. Tell, *et al.* *Using biometrics to understand AI-assisted coding performance and its perception: A registered report*. Registered Report Stage 1 accepted at ESEM 2025, 2025.
- 2026 P. Burelli, F. Calefato, D. Grassi, M. Y. Hristova, N. Novielli, A. A. Romano, P. Tell. *Using biometrics to understand AI-assisted coding performance and its perception*. Registered Report (Stage 2), under review at Empirical Software Engineering (EMSE), 2026. arXiv:2606.20598.

Academic Honors and Awards

- Jan 2025 **Software Engineering Award**. Award for a case study that stood out in the Software Engineering course, conferred by SERLAB and SER&P.

Professional Training and Courses

- Jul 2021 **Cambridge B2 First**. C1-level English language certification (CEFR: 182) issued by Cambridge Assessment English, attesting advanced skills in reading, writing, listening and speaking.
- Apr 2022 **ICDL Full Standard**. International digital skills certification (International Computer Driving Licence), including the Essentials, Base and Standard levels. Includes the ICDL Cyber Security module (Oct 2018).

Computer Skills

Programming Languages	Python, Java, Javascript
Machine Learning and AI	Scikit-learn, biometric classification, deep learning, feature extraction
Biometrics	Acquisition, preprocessing and analysis of biometric signals (EEG, EDA, HRV, eye-tracking) using dedicated instrumentation and specialized libraries (MNE-Python, NeuroKit2, SciPy)
Experimental Design	Design, implementation and conduct of experimental protocols for behavioral and psychophysiological studies with within-subject and between-subject designs.
Software Development Tools	Version control (Git & GitHub)
Design	Fundamentals of UI/UX Design and Graphic Design (Figma, Photoshop)

Language Skills

Native language	Italian
English	Listening: C1 Speaking: C1 Reading: C1 Interaction: C1 Writing: B2

Additional Information

Driving License	Category B
Citizenship	Italian

Interests Passionate about reading and collecting vinyl records. Cultivates an interest in video game history and graphic design.

Declarations

The undersigned declares, pursuant to Articles 46 and 47 of Presidential Decree 445/2000, aware of the criminal penalties provided for by Article 76 of the same Decree in cases of false statements and untruthful declarations, that the information reported in this curriculum is true.

The undersigned authorizes the processing of the personal data contained in this curriculum vitae pursuant to Article 13 of Legislative Decree 196/2003 and Article 13 of Regulation (EU) 2016/679 for the purposes of personnel research and selection.

Date: _____

Signature: _____