

Aglaia Norza

github.com/AglaiaNorza | norzaglaia@gmail.com | LinkedIn

Education

Sapienza University of Rome

Bachelor's Degree, Computer Science

Rome, Italy

Sep 2023 - July 2026

- 29.58/30 weighted GPA;
- Recipient of the “Studiante Meritevole” merit scholarship
- Relevant coursework: Theory of computation, Mathematical Logic, Algorithm design, Semantics of Programming Languages

Liceo Classico T. Tasso

High School Diploma, Classical and Ancient Studies

Rome, Italy

Sep 2018 - July 2023

- Graduation mark: 100/100 cum laude

Experience

Student Collaboration Grant:

2025

Department of Computer Science

– Assistant to the Third Mission Coordinator

- Collected and categorized Department activities, maintained updated records, and supported outreach initiatives.

– Public Outreach Assistant

- Reorganized the Department's website, implemented automation scripts to improve usability, updated and translated content.

Faculty Assembly Student Representative

2024 - 2026

Faculty of Information Engineering, Informatics and Statistics

– Event Organization:

- “*Digital Freedom*” Seminar: co-organized a seminar on digital rights featuring the founder of ParrotOS; co-managed logistics, and moderation; created promotional graphics.
- *Distinguished Lecture (Dr. Richard Stallman)*: successfully invited and assisted in hosting Dr. Stallman for a lecture on Free Software.
- “*LaTeX Lab*” Workshop: helped in designing and delivering a two-session technical workshop on academic writing, mathematical typesetting, and advanced document structure.

Department & Teaching Area Student Representative

2023 - 2026

Department of Computer Science

- Served on both the **Department Council** and the **Didactic Council**, participating in governance decisions regarding teaching policy and curriculum development.
- Gathered feedback from students, reporting concerns and raising issues to improve the learning environment.

Extracurriculars and volunteering

Open Day Speaker - Department of Computer Science

Feb 20, 2025

I spoke at the department's annual open day, sharing my experience as a Computer Science bachelor's student. I gave a personal testimonial, offered advice to perspective applicants, and helped provide insight

into the course and university life.

Sapienza Students Network - Staff Member and Contributor

2024 - 2025

Official site / GitHub

- Collaborated on an independent student-led initiative fostering collaboration and community.
- Assisted in maintaining and organizing open-source learning materials, contributing to GitHub repositories covering multiple course subjects, sharing resources, exercises and past exams to support peers' academic success.

Projects

“notes-ig” - Open-Source Academic Notes Repository GitHub

Throughout my Bachelor's degree in Computer Science, I have maintained a public repository of course notes in Markdown, LaTeX and handwritten formats, with the aim of supporting open education and making learning resources freely accessible.

Interactive Hoare Logic Proof Assistant – Standard ML GitHub

Developed an interactive SML tool to verify imperative programs via Weakest Precondition (WP) calculus and a non-linear proof tree navigator. Integrated **sequitur-sml**: a custom decision procedure for linear arithmetic implications that uses Fourier-Motzkin Elimination, GCD tightening, and DNF normalization (including a “witness” mode that uses backtracking to generate concrete counterexamples for invalid implications). Final project for the Programming Languages course.

Energy storms: High-Performance Parallel Simulation – MPI+OMP, CUDA GitHub

Developed a large-scale physical simulation optimized for hybrid CPU (MPI+OpenMP) and GPU (CUDA) architectures. Focused on domain decomposition and communication-computation overlap, while adapting solutions to the underlying architecture (e.g. NUMA).

“JBubbleBobble” – Java GitHub

Recreated the classic Bubble Bobble game in Java using the MVC architecture. Implemented user profiles, scoring, and power-ups across 25 levels with distinct enemy types, animations, and sound effects. Built the GUI with Java Swing and applied design patterns such as Observer/Observable.

“our_precompiler” – C GitHub

Developed a C pre-compiler tool as part of the *Operating Systems II* course. It parses source files to resolve `#include` directives, validate variable identifiers, remove comments, and produce processing statistics.

“client_server_communication” – C GitHub

Implemented, as part of the *Operating Systems II course*, a multi-threaded C client-server application using sockets for encrypted data transmission, synchronization via semaphores and file decryption on the server side.

Languages

Italian Native proficiency

English C2 (Proficiency) - IELTS Academic Band 8.5

French Elementary proficiency (approx. A1-A2)

Interests

Research: Logics, Formal Methods, Automata- and Game-theoretic approaches.

Personal: Literature, cinema, and music. Tea collector. Former competitive volleyball player (9 years).