ALESSANDRO CLERICI LORENZINI



Doctoral Researcher in Computer Science

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ABOUT ME

Doctoral researcher at the Max Planck Institute for Software Systems, working around formal verification and computational complexity. I hold a Master's in Computer Science from the University of Milan, with an Erasmus stay at the University of Copenhagen and a thesis at Loughborough University, and I love learning by expanding my knowledge base and deepening what I already know. As a computer science enthusiast, I enjoy exploring both the theoretical aspects of my studies and the hardware and software tools I use daily. I primarily work on GNU/Linux systems, among which the main ones run Arch.

EDUCATION

PhD in Theoretical Computer Science

Max Planck Institute for Software Systems

Oct 2026 – ongoing Kaiserslautern, Germany

Supervisor: Rupak Majumdar

Research area: formal verification and computational complexity

M.Sc. in Computer Science

University of Milan

Oct 2022 – Dec 2024 Milan; Copenhagen; Loughborough

Grade: *110 e lode* (summa cum laude)

With semester-long Erasmus stay at University of Copenhagen and thesis at Loughborough University.

Thesis: *Computational Models and Complexity Questions*, supervisors Giovanni Pighizzini (University of Milan) and Luca Prigioniero (Loughborough University)

B.Sc. in Computer Science

University of Milan

Oct 2019 – Oct 2022 Milan, Italy

Grade: *110 e lode* (summa cum laude)

Thesis: *Automi 1-limited* (1-limited automata), supervisors Giovanni Pighizzini and Luca Prigioniero

PUBLICATIONS

Two-Way Automata and Bounded Languages

Conference on Implementation and Application of Automata

CIAA 2025 Palermo, Italy

LANGUAGES

- **English** ●●●●●
- **Italian** ●●●●●
- **French** ●○○○○
- **German** ●○○○○

SOFT SKILLS

Team working · Adaptability & learning · Critical thinking & attention to detail · Problem solving · Reliability

HOBBIES

Linux · FOSS · Latin dance · Volunteering · Musical theater

SCHOLARSHIPS

Support Funding for the Logic Mentoring Workshop @ CSL 2025

VU Amsterdam & UvA

2025 Amsterdam, Netherlands

BUCA'24 fall school scholarship

Venice International University

2024 Venice, Italy

EXPERIENCE

Software Engineer
Bending Spoons

Oct 2025 – Apr 2026 | Milan, Italy

Bending Spoons is an Italian information technology company and conglomerate based in Milan. The People Systems team is focused on the development of solutions for the internal automation and management of employees of the company and their needs.

AI & Multi-Agent Systems Engineer
Technology Reply

May 2025 – Oct 2025 | Milan, Italy

Reply is an Italian information technology consulting and digital services holding company. Within Technology, the AutonomAI Business Unit is focused on the development of solutions for automation based on multi-agent AI systems.

Programming tutor
University of Milan

2020 – 2023 (Seasonal) | Milan, Italy

The programming tutorship offers students from Computer Science Bachelor's degree programs who have not passed the programming exam a recovery and exercise path. The tutor's task is to assist and accompany participating students in their independent learning journey, applying didactics concepts then studied by the ALaDDIn research lab at the University of Milan.

Organizer for the Italian Bebras competition
University of Milan

2020 – 2022 (Seasonal) | Milan, Italy

Bebras is a school-level computer science competition aimed at promoting the awareness of Informatics. The questions are proposed at an international level, and in Italy the competition is organized by the ALaDDIn research lab at the University of Milan.

The lab tutors translate the questions and adapt them to students of different categories and ages. During the competitions, the help desk officials identify irregularities by interacting with the database.

WORKSHOPS AND SCHOOLS

Automata in the Wild 2025
Warwick University

April 2025 | Warwick, UK

Workshop on recent developments in automata theory and related fields.

Support Funding for the DIMACS Tutorial on Fine-grained Complexity
Rutgers University

2024 | New Brunswick, USA

Thesis Abroad Scholarship
University of Milan

2024 | Loughborough, UK

Erasmus Scholarship
University of Milan

2023 | Copenhagen, Denmark

Tuition Fee Reduction for Academic Merit
University of Milan

2020 – 2024 | Milan, Italy

Awarded annually for meritorious academic performance during degree studies

VOLUNTEERING

Erasmus Student Network Volunteer & Coordinator
Erasmus Student Network

2025 – ongoing | Milan, Italy

Erasmus Student Network (ESN) is a non-profit international student organisation. Our mission is to represent international students, thus providing opportunities for cultural understanding and self-development.

- **ESN International:** IT Committee Member; EGM 2027 Programme Team Member; SWEP Lemon Training Community Member
- **ESN Italy:** IT Manager; Commission for International Affairs Member
- **ESN Milano Statale:** Vice President
- **Training:** Facilitator of six sessions at national and international events
- **Projects:** Moon, volunteer management system

Staff of Audio Mostly Conference
University of Milan

2024 | Milan, Italy

Audio Mostly is a major international conference in the field of Sound and Music Computing.

Blood donor
Avis Milano

2018 – ongoing | Milan, Italy

Logic Mentoring Workshop @ CSL 2025

VU Amsterdam & UvA

February 2025 — Amsterdam, The Netherlands

Workshop aimed at introducing young researchers to the technical and practical aspects of a career in scientific research.

Challenges in building Billion Users Cloud Applications

Bertinoro international Center for informatics

October 2024 — Venice, Italy

Structured intensive course on advanced distributed systems for a billion+ users, with lecturers from Google US.

DIMACS Tutorial on Fine-grained Complexity

Rutgers University

July 2024 — New Brunswick, USA

Intensive academic program on fine-grained complexity, a field of theoretical computer science that studies the complexity of problems in P under hardness hypotheses.

ATTENDED CONFERENCES

Selected seminar series

- One FLAT World seminar
- Automata in the Wild 2025 at Warwick University
- departmental seminars at the University of Milan, such as MUSEMI
- departmental seminars at the University of Copenhagen
- departmental seminars at Loughborough University, such as the Loughborough TCS Seminar

Conferences

- CIAA 2025 (presented)
- No Hat cybersecurity conference
- Audio Mostly

PROJECTS

Also see website and GitHub.

Homelab and SimpoLab

My VPS and homelab run mail, DNS, Git and CI servers and my own apps as Podman containers, deployed with GitOps. They continue SimpoLab, the server I ran for a group of fellow students until the project closed.

University projects

Development of various projects, most of which stored in a GitHub organization, related to university courses. For example

- algocomp, notes on Algorithms and Complexity (ITA)
- debian-mips, a project about emulating Debian on the MIPS architecture in collaboration with professor Nicola Basilico (University of Milan)
- recomyelp, a simple recommendation system for the Yelp dataset running on Google Colab

LICENSES

Driving License B
Cars and smaller vehicles