Eduardo Venturini

Curriculum Vitae

Education

2024–2029   **PhD in Mathematics**, *Uppsala universitet*

I am working on a research project on Hecke algebras and categorical representation theory under the supervision of Prof. Hankyung Ko.

In addition to my research work, I take an active part in the life of the department: I attend lecture cycles and seminars, both as an auditor and as a presenter, I follow PhD courses and I dedicate a fifth of my time to teaching undergraduate courses.

2022–2024   **Master degree in Mathematics**, *Università di Pisa*

Algebra major: I have taken courses in general algebra, algebraic number theory, algebraic combinatorics and algebraic geometry.

I worked on a research project in algebraic combinatorics, specifically on chromatic quasisymmetric functions, their expansion in various bases, and relationships with particular forests and orientations.

My thesis was based on the state of the theory at that time and the results found.

Link to the thesis: `https://ventu06.gitlab.io/master-thesis/thesis.pdf`

GPA: *29.44/30*, Final Grade: *110/110 cum laude*

2019–2024   **Degree in Mathematics**, *Scuola Normale Superiore*, Pisa

University institute of higher education admitting 32 pure-science students every year. The scholarship provides free room and board and requires taking extra courses, holding seminars on studied topics and maintaining a GPA higher than 27/30.

GPA: *29.75/30*

2019–2022   **Bachelor degree in Mathematics**, *Università di Pisa*

Thesis title: La decomposizione di Bruhat e il teorema di Borel-Weil.

Link to the thesis: `https://ventu06.gitlab.io/tesi-triennale/tesi.pdf`

GPA: *29.53/30*, Final Grade: *110/110 cum laude*

Teaching Experience

Spring 2025   **Teaching Assistant - Probability and Statistics**, *Uppsala universitet*

Fall 2024   **Teaching Assistant - Linear Algebra II**, *Uppsala universitet*

Fall 2023   **Tutor - Formalizing Mathematics in LEAN**, *Università di Pisa*

Other Experiences

2021–2024   **System Administrator**, *Scuola Normale Superiore (SNS)*, Pisa

Administration and maintenance of the Computer Rooms of Timpano and Acconci colleges of SNS and of the Unified Zone (UZ), the network infrastructure of the students of SNS.

Our system runs entirely on free software (Debian GNU/Linux): we use several distributed file systems (AFS for users, Glusterfs and Cephfs for servers), LDAP as identity management system, services are hosted on our Kubernetes cluster and we use an Icinga, Grafana and an Elasticsearch cluster for monitoring.

Awards

	International competitions
2020–2024	SWERC (regional phase of the ICPC) - Five participations
2019	International Mathematical Olympiads (IMO) - Bronze medal
2019	Balkan Mathematical Olympiads (BMO) - Bronze medal
2019	Romanian Master in Mathematics (RMM) - Bronze medal
	National competitions
2019	Italian Mathematical Olympiad - Gold medal
2018	Italian Olympiads in Informatics - Silver medal
2014–2019	Participated three other times in the Italian Mathematical Olympiad winning a silver medal and a bronze medal.
	Participated one other time in the Italian Olympiads in Informatics winning a bronze medal.
	Participated three times in the Italian Team Mathematical Olympiad winning a bronze medal.

Computer skills

Programming and markup languages

C - ●●●●○	C++ - ●●●○○	Rust - ●●○○○
Python - ●●●○○	Haskell - ●●●○○	
LEAN - ●●●○○	Sage - ●●○○○	
LaTeX - ●●●●○	HTML - ●●●○○	Typst - ●●●○○

Other skills

- I use `vim` daily as text-editor
- User of the `GNU/Linux` environment (especially `NixOS`, `ArchLinux` and `Debian`), knowledge of system administration tools
- Network administration: Shared Filesystems, Routing Policies, DNS
- Other tools: `git`, `ansible`, `docker`, `kubernetes`

Languages

Italian	●●●●● - Mother tongue
English	●●●●○ - Level C1
German	●○○○○ - Level A1
Swedish	●○○○○ - Level A1

Other interests

- Sports: running, cycling, hiking, swimming, climbing
- Foosball
- Baking (and eating) pizza