

Davide Modesto

Education

- Currently **Master of Mathematics**, University of Vienna, Vienna
2019–2022 **Bachelor of Mathematics**, Università di Pisa, Pisa, Grade: 102/110
2013–2018 **High School**, Istituto Tecnico Benedetto Castelli, Brescia, Grade: 80/100

Bachelor's thesis

title *Flusso geodetico e frazioni continue*
supervisor Carlo Carminati
description Study of the asymptotic convergence rate of continued fraction approximants using the ergodicity of the geodesic flow on the modular surface.
resources [Thesis](#), [Slides](#)

Experience

- Jul–Sep 2024 **Entertainment Staff**, Jaz Crystal Resort, Marsa Alam, Egypt
Worked in guest entertainment and activities, improving communication and coordination in a multicultural setting.
- Aug–Sep 2023 **Volunteer**, Local Village Project, Near Lisbon, Portugal
Participated in community initiatives supporting a small rural village.
- 2018–2020 **Rider**, Deliveroo
Delivery rider, managing routes efficiently through personal tools and automation.
- 2017 **Internship**, Myti srl

Skills

Operating Systems

Experienced with both Windows and Linux (especially Arch Linux). Example setup: [video demo](#).

Reverse Engineering

Extensive experience in static and dynamic analysis of web and Android apps. Reverse-engineered the Deliveroo Rider app (2019). Analyzed [Squid](#) and [AnkiDroid](#), and created a [converter](#) for Squid notes to Anki cards.

Security

Developed a [malicious browser extension](#) as part of a thesis demo to show cookie exfiltration attacks. Reported vulnerabilities in: – Dormitory Wi-Fi login (Pisa) allowing device disconnection. – Social Hub app (Vienna) affecting laundry authentication.

CTF / Challenges

Completed all tasks in the **Listen Lab Berghain Challenge** with a strong score. Published write-up: [link](#).

Automation / Bots

Developed a Klondike Solitaire (Turn 3) solver in Node.js — [demo](#). Currently rewriting it in Rust.