ALESSIO FERRARINI

MSc CS Student

aferrarini01@googlemail.com | alecsferra | alecsferra | Padua, Italy

EDUCATION

Master's degree in Computer Science — **University of Padua**

30/30 GPA — Sept 2022 - June 2023 (expected)

- Programming languages and systems track.
- Relevant course work includes: Advanced topics in programming languages, Formal methods for cyber-physical systems, Functional languages, Languages for concurrency and distribution, Software verification and Type Theory.

Bachelor's degree in Computer Science — **University of Padua**

110 cum laude — Sept 2019 - June 2022

- Thesis title: Implementation of a static typechecker and optimizations for a programming language.

WORK EXPERIENCE

Tutor — **Univeristy of Padua**, Padua, Italy

Teaching | Public speaking — Sept 2022 – Present

Supported the teaching of the following undergraduate level courses:

- Algorithms and data structures.
- Automata and formal languages.

University internship — **Zucchetti**, Padua, Italy

C++ | Haskell — May 2022 – Jun 2022

- Developed a static type checker for the CPL programming language.
- Improved runtime performances by 30
- Implemented new features in the language, including:
  - Generics
  - Sum types
  - Non-nullable types.

Junior Developer — **Accenture**, Verona, Italy

Java | Spring | TypeScript | VUE | Flutter — Jul 2019 – Sep 2019

- Developed an authentication system based on the OAuth2 specification.
- Developed a set of proof of conceptDeveloped an authentication system based on the OAuth2 specification Developed a set of proof of concept.

ACHIEVEMENTS

Cyber Challenge 2020 — **Laboratorio Nazionale di Cybersecurity del CINI**, Padua, Italy

Python | C++ | CyberSecurity — Nov 2021

Admission to the course was granted after passing three levels of tests which resulted in an admission rate of 12.57%. The training course took place at the University of Padua from March to June 2020. The total duration of the course was 72 hours, with 24 hours of lessons and 48 hours of exercises, requiring significant additional commitment.

SIDE PROJECTS

Rec Static Analyzer

Haskell — alecsferra/RecStaticAnalyzer

An abstract interpretation based static analyzer for the REC programming language.