

# Matteo Durante

Mathematician & Software Engineer

Email [waifod@pm.me](mailto:waifod@pm.me)

Phone **+393518357770**

GitHub [waifod](#)

LeetCode [waifod](#)



## SUMMARY

My notable strengths lie in persistence and adeptness in quantitative and abstract reasoning, honed through dedicated pursuits in theoretical mathematics, computer science, and independent exploration of Linux from an early age. Transitioning into the professional realm, my passion has evolved towards crafting performant software solutions, and I am currently seeking fresh opportunities related to C++, Rust, distributed systems or low latency, high-performance software.



## SKILLS

### Computer

**Languages (professional):** C++, Java, Obj-C, Swift

**Other languages:** Haskell, Kotlin,  $\text{\LaTeX}$ , Python, Rust

**Tools:** Git, Tmux, Vim et al

**Other:** Algorithms, Data Structures, Linux, FP, OOP

### Quantitative

Analysis, Differential Geometry, Game Theory, Mathematical Logic, Microeconomics, Numerical Analysis, Probability Theory, Type Theory and lots of Algebra

### Languages

**English:** C1, IELTS 8.0 (2017)

**French:** A2

**Italian:** native

**Spanish:** B2, currently studying



## EDUCATION

### Mathematics, MSc / **ALGANT** / 2018 - 2022

Leiden (NL, M1), Regensburg (DE, M2) / Distinction, 1.1

**Focus** Algebra and related fields

**Thesis** [Localizations of Models of Type Theory](#)

**Supervisor** [Hoang-Kim Nguyen](#)

### Mathematics, BSc / **UniTo** / 2015 - 2018

Turin (IT) / 110 cum Laude

**Focus** Algebra, Analysis, Geometry, Logic, Probability

**Thesis** From Algebraic Varieties to Schemes

**Supervisor** [Cinzia Casagrande](#)

### Economics, BSc / **Collegio Carlo Alberto** / 2016 - 2018

Turin (IT) / Honor Program / A

**Focus** Game Theory, Microeconomics



## WORK

### Software Dev Engineer L4 / 2022 - ongoing

#### Amazon / Madrid (ES)

Developing services managing author data with AWS, DynamoDB, Java and Typescript. Implemented features of the Library of the Kindle products using Obj-C, Swift and C++. The main project was the development of a cross-surface framework encapsulating the business logic across all Kindle projects, of which I owned the entire integration into the Kindle app for Apple devices.

Agile Android autonomy AWS C++ DynamoDB  
Git iOS Java Kotlin Obj-C Swift Typescript  
Unix Terminal

### Math Coach / 2015 - 2017

#### Associazione Subalpina Mathesis / Turin (IT)

Coached prospective participants of the Italian Math Olympics for two high schools, preparing them for both individual and team competitions

Olympic Math Teaching Team Building



## PROJECTS

- [learningcpp](#), a collection of resources and sample programs to learn C++
- [rtnya](#), a C++ ray tracing software
- [funkytextgenbot](#), a Rust text-generating Telegram bot
- [Notes on Monad Theory](#)



## AWARDS

- Collegio Carlo Alberto's scholarship 2016-2018
- 22nd placement at Bocconi's Games 2017
- 2nd placement at the individual math competition and 3rd placement at the team competition by the Diderot Project (Alpha Class) 2016
- My team got 12th and 7th placements at the Italian Math Olympics finals in 2014 and 2015 respectively