

SUMMARY

Currently pursuing a Master's degree in Computer Science. Interested in security, embedded systems, algorithms and data structures, software development, mathematics, and education.

EDUCATION

- **Universidad de Chile** *Santiago, Chile*
M.Sc. | *Computer Science*
Advisor: Prof. Gonzalo Navarro
2024 – Present
- **Universidad de Chile** *Santiago, Chile*
P.Eng. | *Computer Science and Engineering*
Advisor: Prof. Gonzalo Navarro
2022 – Present
- **Universidad de Chile** *Santiago, Chile*
B.Eng. | *Computer Science and Engineering*
2018 – 2022

EXPERIENCE

- **Inria** *Paris, France*
Research Intern
January 2024 – April 2024
 - Three month internship in the Inria-AIO team.
 - Participated in various academic projects, including topics like hardware security, embedded systems, IoT and multi-robot systems.
- **Millennium Institute Foundational Research on Data** *Santiago, Chile*
Software Engineering Intern
January 2022 – February 2022
 - Modernization of a C++ project.
 - Reimplementation of compression and search algorithms for large string dictionaries.
- **SARCAN** *Santiago, Chile*
Software Engineering Intern
January 2021 – February 2021
 - Development of a web application for performing CRUD operations on a database and interacting with an optimizer.
 - Creation of a static website built with Hugo for internal company documentation.
- **Easy Program Checking** *Santiago, Chile*
Developer
August 2020 – January 2021
 - Open source web application created with Django used for the grading of students' assignments in computer science subjects.
- **Brazilian ICPC Summer School** *Campinas, Brasil*
January 2020
 - Participated in the ICPC Brazil Summer Camp, World Finals class.

- **Universidad de Chile**

Teaching Assistant

Santiago, Chile

2020 – Present

- CC4005 Competitive Programming (2021 to 2024).
- CC3101 Discrete Mathematics for Computer Science (2023).
- CC3301 Systems Programming (2021, 2022 and 2024).
- CC3003 Algorithms and Data Structures (2020 and 2021).



PUBLICATIONS

- **Ultra-Low Power DNN-based TSCH Scheduling at the Edge using the MAX78000.** *Martina Balbi, Erman Okman, Blaz Korecic, Lance Doherty, Thomas Watteyne.* Accepted by the 3rd International Conference on Embedded Systems and Artificial Intelligence (ESAI).
- **Single-Chip Motes and SRAM PUF: Feasibility Study.** *Sara Faour, Blaz Korecic, Mališa Vučinić, Filip Maksimovic, David C Burnett, et al.* In proceedings of the 2024 IEEE Workshop on Crystal-Free/-Less Radio and System-Based Research for IoT (CrystalFreeIoT).



VOLUNTEERING

- **Chilean ICPC Winter Training Camp (CIPC)** Concepción, Chile
 - Organized a Chilean competitive programming winter school, with the participation of 2024 over 60 university students across the country.
- **Computer Science Department Student Council (CaDCC)**
 - Member of the Computer Science Department Student Council, actively assisting in organizing various 2024 activities throughout the year.
- **Chilean Olympiad in Informatics (OCI)**
 - Organizer and problem setter for Chile's premier programming competition for secondary school 2021-2024 students, which serves as the national qualifier for the International Olympiad in Informatics (IOI).
- **Preuniversitario José Carrasco Tapia** Santiago, Chile
 - Volunteered as mathematics teacher at an institution that assists economically disadvantaged 2020 students in accessing higher education.



ACHIEVEMENTS

- **International Collegiate Programming Contest**
Competitor
 - **ICPC 2023:** Placed 7th in the South America/South finals. Second place in Chile. Qualified to the 2024 ICPC Latin America Championship in Guadalajara, Mexico.
 - **ICPC 2021:** Placed 6th in the South America/South finals. First place in Chile.
 - **ICPC 2019:** Placed 16th in the South America/South finals. Third place in Chile.
 - **ICPC 2018:** Placed 31st in the South America/South finals. Sixth place in Chile.
- **IEEEExtreme**
Competitor
 - **IEEEExtreme 18.0:** Placed 45th out of 8785 teams worldwide.
 - **IEEEExtreme 15.0:** Placed 21st out of 2402 teams worldwide.
 - **IEEEExtreme 13.0:** Placed 116th out of 2534 teams worldwide.

SKILLS

- **Programming:** C, C++, Python, JavaScript, TypeScript, Java, SQL, Bash, Scheme, Lua, OCaml.
- **Frameworks:** React, Next.js, Astro, Django, Flask, FastAPI, Qt.
- **Other:** Docker, Linux, Git, CI/CD, PostgreSQL, NoSQL, Firebase, AWS, DigitalOcean.

LANGUAGES

- **Spanish:** Native
- **English:** Advanced
- **French:** Basic