

## 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

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- **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

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- **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

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- **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 59th 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

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- **Programming:** C, C++, Python, Java, SQL, Javascript, Bash, Scheme, OCaml.
- **Frameworks:** React, Django, Flask, FastAPI, Qt.
- **Other:** Docker, Linux, Git, PostgreSQL, NoSQL, Firebase, AWS, DigitalOcean.

## LANGUAGES

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