Caetano Borges

caetanoborges8@gmail.com | linkedin.com/in/caetano-borges | github.com/c4ebt

EDUCATION

École Polytechnique Fédérale de Lausanne — Lausanne, Switzerland
Bachelor of Engineering in Computer Science, Exchange semester — *Jan. 2025 – Jul. 2025*

Pontificia Universidad Católica de Chile — Santiago, Chile
Bachelor of Engineering in Computer Science, Minor in Theoretical Computer Science — *Mar. 2022 – Jun. 2027*
- Ranked #1 out of 850 in the cohort with a 4.0 GPA.
- Academic excellence scholarship awarded to the #1 ranked student.

EXPERIENCE

Applied Cryptography Researcher — Sept. 2025 – Present
CISPA Helmholtz Center for Information Security − cispa.de — *Hybrid - Saarbrücken, Germany*
- Researched oblivious data structures and algorithms for the stable matching problem family.

Content Engineer — Oct. 2020 – Jun. 2023
Hack The Box − hackthebox.com — *Remote*
- Engineered advanced binary exploitation training material for cybersecurity experts and CTF enthusiasts.

Penetration Tester — Jan. 2023 – Mar. 2023
Nivel4 CyberSecurity − nivel4.com — *Santiago, Chile*
- Provided ethical hacking services for critical infrastructure such as banks, insurance providers, etc.

Security Researcher — Nov. 2020 – Feb. 2021
Independent − c4ebt.github.io — *Remote*
- Discovered a novel attack vector on Linux's most widely used software library, the GNU C Library (*glibc*).

ACADEMIC EXPERIENCE

Data Structures Research Assistant — Aug. 2024 – Dec. 2024
UC Chile — *Santiago, Chile*
- Researched novel worst-case-optimal data structures (qdags) for database joins.

Logic & Deep Learning Research Assistant — Dec. 2023 – Aug. 2024
University of Cambridge & UC Chile — *Santiago, Chile*
- Researched the logic capabilities of Graph Neural Networks that employ external memory and data structures.
- Visiting researcher at the University of Cambridge.

Teaching Assistant — Mar. 2023 – Present
UC Chile — *Santiago, Chile*
- Discrete Mathematics (IIC1253) '24 (1, 2), '25 (2); Computing (IIC1005) '23 (1, 2), '24 (1, 2), '25 (2).

EXTRACURRICULARS

Competitive Programming — Jan. 2024 – Present
- Competed in collegiate competitive programming representing *UC Chile*.
- Won the 2024 edition of the Chilean Programming Tournament with team *IMC alto*.

Capture The Flag — May 2019 – Present
- Participated in the International Cybersecurity Championship (ICC) 2023, 2024 and 2025 editions as Team Latam's binary exploitation specialist.
- Competed in CTFs with teams Crusaders of Rust and BirdsArentReal as a binary exploitation specialist.

Security UC Club — Sept. 2022 – Present
- Founded the Cybersecurity Club at UC Chile.
- Lead the organization of 3 CTFs: DCCTF (2022), Hack.ING 2023 and 2024, with 600+ in-person participants.

TECHNICAL SKILLS

Programming Languages: Python, C/C++, Rust, Multi-arch Assembly, SageMath, Ruby, JavaScript
Tools/Frameworks: IDA, Ghidra, GDB, Pwntools, Burp Suite, Docker, Git, Ruby on Rails, React
Spoken Languages: Spanish (native), Portuguese (native), English (C2)