Eugenio Cruz

✉ eugenio.cruz.ossa@gmail.com · 🌐 Web · ⌂ EugenioCruz · 🔗 eugenio-cruz-ossa · 📍 Santiago, Chile

Summary

Mathematical and Computational Engineer specialized in Data Science and Optimization. I excel in collaborative environments with a proactive and positive attitude. Graduated as the top student in Mathematical and Computational Engineering from my class. Strong foundation in machine learning, statistical modeling, and optimization algorithms. Passionate about water skiing, snow skiing, and rock climbing.

Education

EPFL, SWITZERLAND — Feb-Mar 2026
Visiting Researcher - Master's Program
· Research under the supervision of Prof. Andrés Cristi on online matching.

PUC CHILE — 2025
M.Sc. in Engineering Sciences
· Industrial and Systems Engineering.
· Under the supervision of Victor Verdugo in Computational Mathematics applied to Pricing.

PUC CHILE — 2024 - 2025
Mathematical and Computational Engineer
· Graduated in **1st Place of the IMC Class**: Award for Best Student in Mathematical and Computational Engineering.
· Summa Cum Laude.

PUC CHILE — 2020 - 2024
Bachelor in Engineering Sciences
· Specialization in Mathematical Engineering.
· Major: Data Science.
· Minor: Theory of Computation.

Technologies

Python · R · C++ · SQL · Git · Docker · GCP · PostgreSQL · pandas/numpy/scipy · scikit-learn · XGBoost · PyTorch · TensorFlow · LangGraph · MLflow · Gurobi

Undergraduate Research

○ **Advanced Algorithms for Collective Decision Making (2024)**

Elections, goods allocation, matching platform assignment. In collaboration with Professor Victor Verdugo.

○ **Computation of Eigenfunctions of Classical Fluid Energy Operators Using Spectral Methods (2022)**

Global stability study of laminar flow. In collaboration with Professor Federico Fuentes.

Experience

Co-Founder & Lead Data Scientist – Teapot — 2024-Present

· Co-founded a startup developing personalized study guides using statistical models and AI. Working together with Filadd (YC S21).
· Led development of optimization algorithms for educational content delivery using LLM workflows, LangGraph, TensorFlow, and GCP infrastructure.
· Gained extensive experience in Git best practices, documentation, repository maintenance, and CI/CD pipelines.

Capstone Project II - Data Science – Ainwater — 2025

· Developed AI models to identify critical water access zones in Chile using geographic and social data.

Front Office Trading Consultant Intern – Murex — 2025

· Designed solutions for trading users and optimized Front Office processes in Murex MX.3.
· Customized views and workflows to improve trading desk efficiency.

AI Data Analyst – Pareto AI — 2024-2025

· Performed data labeling and validation to improve the quality of training datasets for language models.
· Contributed to the evaluation of responses generated by LLMs, ensuring coherence and accuracy in their outputs.

Teaching Experience – PUC Chile — 2022-2024

· Lead Teaching Assistant: Probability and Algorithms (2024).
· Teaching Assistant: Introduction to Differential Privacy (M.Sc., 2024).
· Teaching Assistant: Calculus III (2022). Conducted lectures, created study materials, and graded assignments.

Capstone Project I - AI Audit – Banco Itaú Chile — 2023

· Audited Machine Learning models and defined guidelines for their maintenance.
· Executed model validation tests and established governance protocols.

Extracurricular Activities

○ **2025:** Participant in MIP South America 2025.

○ **2025-Present:** IT Coordinator, Pontem Consulting Group

○ **2025 and 2026:** Participant, Summer School of Discrete Mathematics (CMM, IMC, UC, UChile)

○ **2024:** Founder and Instructor, Programming and Algorithms Course (Colegio San José de Chicureo)

○ **2021-2023:** Co-Founder, Open Source UC

Languages

Spanish (Native) · English (C1) · French (A1-A2)

Publications

2026 (Upcoming): The Competition Complexity of Static Pricing for Multi-item Prophet Inequalities. *Operational Research Journal (OR)*. Authors: Eugenio Cruz-Ossa, Sebastian Perez-Salazar, Victor Verdugo.