

Joao P. F. Barbosa

+1 (412) 478-9142 | joaobarbosa@cmu.edu | [linkedin.com/in/jpfbarbosa](https://www.linkedin.com/in/jpfbarbosa) | github.com/ojpbarbosa

EDUCATION

Carnegie Mellon University

Bachelor of Science in Computer Science

Pittsburgh, PA

May 2029

EXPERIENCE

Vento

Intern → Founding Product Engineer

Apr 2026 – Present

San Francisco, CA

- Interviewed **10+** owners in New York, San Francisco, Manila and Brazil to set product direction.
- Ran customer discovery (Mom Test) on 8 theses, backing the pivot into a **\$9B** unrecovered market.
 - ↳ Vento raised a **\$3M** seed round to run a **28K-account** pilot for banks and collection agencies.
- Built the voice agent's outbound core: STT, reasoning (LLM) & TTS in **under 900 ms/turn**.

XP Securities (Nasdaq: XP, ~\$290B AUM)

Quantitative Developer Intern

Jul 2026 – Aug 2026

New York, NY

- Developed the Issuer Opportunity Screener for the Global Markets **credit trading desk**.
 - ↳ Shipped to daily desk production on Bloomberg BQuant (pandas, scikit-learn, SciPy, BQL).
- Ranked **275 bond and CDS issuers** on **21 features** in **~2 seconds**, down from ~30 minutes each.
- Modeled fair spread by a **5-factor** cross-sectional regression and **k-means** peer groups.

Jane Street

FOCUS Participant

May 2026

New York, NY

- Selected for the **invitation-only program**: trading, low-latency systems, finance and SWE bootcamps.

iFood

Software Engineer Intern → Junior Software Engineer

Jan 2024 – Jan 2026

Sao Paulo, Brazil

- Owned the Order External Audit API, opening **15M+ daily log records** to integrators.
 - ↳ Queried 6K+ times monthly; cut integrator support requests by **18%**, at **NPS 96**.
- Maintained Kotlin and Go microservices in the Order Platform, **4M orders & 600M+ requests/day**.
 - ↳ Held 99.99% webhook & MQTT event delivery for **55M+ MAU** at **sub-20 ms** for **~1M RPM**.
- Worked the rollback on a **3-hour** outage, one of the platform's worst, after my change met one in flight.
 - ↳ For a lunch rush hour, **nobody in Brazil could order McDonald's** due to missing observability.

PROJECTS & RESEARCH

Google AlloyDB | Open-Source Contributor

Sep 2026 – Present

- Maintaining a CLI for AlloyDB, Google Cloud's managed PostgreSQL; mentored by Google engineers.

Rede Mulher Empreendedora | Technical Lead

May 2026 – Present

- Leading engineering on a platform pairing **900k+ women** entrepreneurs with **200+** mentors.
- Replaced per-pair LLM calls with embedding filter and rank: sub-second matching, **6× cheaper**.

Autonomous Idea-to-Deployment Agent Swarm | Stanford TreeHacks Participant

Feb 2026

- Created parallel agent harness with state verification to deploy solutions from PRDs autonomously.

Particles on Canvas: Creating Art to Further Scientific Divulcation

Apr 2024 – May 2024

- **1st in Latin America** of ~500 teams in a CERN particle accelerator competition.
- Led 6 people building a **feedforward neural network** pipeline from collision data to digital art.

Adaptive Demographic Modeling for Public Health Crisis Management

Feb 2023 – Mar 2024

- Simulated COVID-19 across **1.2M agents** within **5%** of the city's 3-year death toll in 2.5 min.
- **4th at Brazil's largest STEM fair**; sought after by two cities in Sao Paulo state for crisis response.

ACTIVITIES & LEADERSHIP

Estudar Foundation, Tech Fellow (60 of ~8,000 applicants)

Jun 2025 – Present

Finalist, Brazilian Olympiad in Informatics

2023

Gold & Silver Medalist, National Robotics, Science & Astronomy Olympiads

2022 – 2023

TECHNICAL SKILLS

Languages & Frameworks: Go, TypeScript, Python, C++, Kotlin, Java, C#, Node.js, React, Spring

Tools: AWS, Kubernetes, Terraform, Redis, Postgres, Pub/Sub, ELK, OpenCode, AI coding agents