

Joao Francisco Pinho

Contact & Socials

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Education

University of Sao Paulo | CGPA: 8.5/10

Bachelor in Computer Science

Sao Carlos, Brazil | **Jan 2020 - Dec 2025 (expected)**

University of Halmstad

Exchange Program in Computer Science

Halmstad, Sweden | **Jan 2022 - Jun 2022**

Work Experience

Robert Bosch GmbH | Software and Data Engineering Intern

Stuttgart, Germany | **Nov 2023 - Apr 2024**

Purchasing Quality Strategy & Initiatives

- Developed and optimized **complex PostgreSQL & OracleSQL queries**, reducing data retrieval time by **90%**, improving **real-time analytics performance**
- Engineered **automated data pipelines and reporting workflows** using Microsoft Power Platform, integrating **PowerBI, git and Track & Release** to better streamline insights
- Engineered **interactive dashboards in PowerBI** enabling **real-time tracking of supplier performance and purchasing quality KPIs**
- Collaborated with cross-functional teams to **integrate business intelligence solutions**, ensuring **data consistency, traceability and process optimization**

University of Sao Paulo | Teaching Assistant

Sao Carlos, Brazil | **2021 & 2023**

Data Structures and Algorithms, Database Systems

- Assisted students in **Data Structures and Algorithms (2021)**, and **Database Systems (2023)**
- Created course material and graded programming assignments in **C**

Projects

Digital Signature Audit | Panasonic Avionics

May 2023 - Feb 2024

Consulting Project, Cybersecurity & Compliance

- Conducted a **security audit** on a **Maintenance and Repair record-keeping system**
- Evaluated **digital signature implementations** for **compliance** and tamper resistance
- Delivered technical recommendations to enhance **security** and **regulatory adherence**

Ganesh | Cybersecurity Research and Work Group

Feb 2020 - Present

- Active in Cryptography, Reverse Engineering, and Computer Networks areas
- Participated in Capture The Flag (CTF) competitions: Google CTF, CSAW CTF, Down Under CTF

USP 33½ | Online Store Project

Aug 2024 - Dec 2024

- Full Stack Online Store Application** made for Web Development course
- Implemented a **persistent shopping cart and order log**, using local storage and a **MongoDB-powered backend** with **user authentication**
- Designed a responsive UI with integrated **search & filtering** features for accessibility
- Built **RESTful APIs for product/user management and tested endpoints** using Postman

Research

Post-Quantum Cryptography Research

Feb 2025 - Present

Undergraduate Research – **University of Sao Paulo**

- Researching **post-quantum cryptography algorithms** for **banking security** applications
- Evaluating **lattice-based and hash-based cryptographic** protocols for **resistance against quantum attacks**
- Recipient of Scholarship** from FDTE (Foundation for Technological Development of Engineering)

Technical Skills

- Git, Microsoft Office, VS Code, Microsoft Power Platform, Docker
- Databases, Unit Testing (JUnit)
- C, C++, Python, SQL, JavaScript, Java, React, Wireshark, OpenCV

Honors

- High School Internal Math Olympiad and Math Kangaroo Gold Medalist
- Member of National Honor Society (High School)
- Research funding by FDTE (Foundation for Technological Development of Engineering)

Languages

Portuguese (Native)
English (Fluent)
German (Beginner)
French (Beginner)