Joao Francisco Pinho

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Education

University of Sao Paulo   Sao Carlos, Brazil
Bachelor in Computer Science   Jan 2020 – Dec 2025 (expected)
CGPA: 8.5/10

University of Halmstad   Halmstad, Sweden
Exchange Program in Computer Science   Jan 2022 – Jun 2022

Work Experience

Robert Bosch GmbH – Software and Data Engineering Intern   Stuttgart, Germany
Nov 2023 – Apr 2024

- 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

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

Projects

USP 33 $\frac{1}{3}$ – Online Store Web App

- **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

Digital Signature Audit – Panasonic Avionics   *May 2023 – Feb 2024*

- 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 Group   *Feb 2020 – Present*

- Research in Cryptography, Reverse Engineering, and Networking
- Participated in CTFs: Google, CSAW, Down Under

Post-Quantum Cryptography Research – USP   *Feb 2025 – Present*

- Researching post-quantum cryptography algorithms for banking security applications
- Focus on post-quantum banking security applications
- Funded by FDTE (Foundation for Tech. Development)

Technical Skills

Languages: C, C++, Python, Java, JavaScript, SQL, React
Tools: Git, Docker, PowerBI, VS Code, Wireshark, OpenCV
Databases: PostgreSQL, OracleSQL, MongoDB
Testing: JUnit

Languages

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

Honors

FDTE Research Scholarship
Math Kangaroo Gold Medalist
National Honor Society Member