JOÃO PAULO COUTINHO DE MATOS

PROFESSIONAL OBJECTIVE

Seeking an entry-level role in Software Engineering and AI development, where I can leverage my proficiency in Python, Ruby, SQL, and frameworks like Django and Flask to develop scalable, innovative solutions that drive meaningful impact.

SKILLS

- **Programming Languages:** Proficient in Ruby (Rails framework) and Python (Flask framework), with experience in backend development.
- **Data Analysis & Engineering:** Skilled in data manipulation using Pandas and PySpark, with experience in creating automated pipelines.
- AI & Machine Learning: Foundation in machine learning techniques and AI development through coursework, with ongoing projects in LLM model training.
- **Databases:** Experience with PostgreSQL and MongoDB, including data structuring and SQL queries.
- **Tools:** Familiar with Jupyter Notebook for data projects, Power BI for data visualization, and the Office Suite for productivity and reporting.
- **Soft Skills:** Strong teamwork and collaboration skills, problem-solving ability, curiosity, and a continuous learning mindset.

EDUCATION

Uniacademia Juiz de Fora — Bachelor's Degree in Biological Sciences

FEBRUARY 2015 - AUGUST 2018

USP-Esalq — Master of Business Administration in Software Engineering

OCTOBER 2024 - JUNE 2026

CERTIFICATIONS

- MITx/edX: Introduction to Computer Science and Programming Using Python.
- **Codecademy**: Data Engineering Career Path, Learn Ruby, Learn Ruby on Rails, Learn MongoDB
- **freeCodeCamp**: Responsive Web Design, JavaScript Algorithms and Data Structures
- Santander Open Academy: Power BI
- EF SET: C2 Proficiency in English

PROFESSIONAL EXPERIENCE

1. Cauzin Tintas Leopoldina – Financial Manager

NOVEMBER 2020 - JUNE 2024

Managed cash flow, budgeting, and financial analysis to support strategic decision-making. Implemented process optimizations and financial reporting solutions for operational efficiency.

2. Colégio Apogeu – Teaching Assistant

DECEMBER 2018 - SEPTEMBER 2019

Supported students in science and biology, organized study groups, and provided in-class assistance.

3. Embrapa Gado de Leite - Research Intern

DECEMBER 2015 - JULY 2017

Conducted field and lab experiments in sustainable agriculture and animal welfare. Managed samples and data, and assisted in analyses contributing to research publications.

PROJECTS

- LLM Model Training: Contributed to multiple LLM training projects, where I developed realistic, complex prompts to train AI models in natural language processing and code understanding, carefully evaluated model responses, provided detailed annotations, and played an active role in guiding models toward improved accuracy and contextual understanding.
- Bike Rental Data Analysis: Engineered a data project using CSV data on bike rentals and weather conditions. Processed data with Python and Pandas in Jupyter Notebook.
- Stack Overflow Survey Analysis: Analyzed annual survey data using Python, Pandas, and Matplotlib to extract insights on developer trends.
- Automated Subscriber Pipeline: Created an automated data pipeline for subscriber data, implementing changelogs and data cleaning routines in Python and Bash.
- Wikipedia Clickstream Analysis: Used PySpark to process clickstream data from Wikipedia, applying SQL queries and data frames for analysis.
- Notification System in Ruby on Rails: Developed a scalable notification system as part of a coding challenge, focusing on efficient backend development.
- Flask Cost Calculator: Built a Flask application to calculate costs and sales prices from XML invoice data, deployed on Heroku.