

Marcus Vinicius Pereira

Software Developer

mav.pereira@outlook.com

+55 (45) 999 128 304

linkedin.com/in/marcusvpereira

github.com/mv-per

GMT-3

GOAL

As a skilled software developer, I am seeking a challenging role in a dynamic and innovative company where I can apply my expertise in coding, debugging, and problem-solving. I thrive in collaborative environments and enjoy working as part of a team to deliver high-quality products. With my strong communication skills and ability to manage complex projects, I am confident in my ability to make a significant contribution to any team.

WORK EXPERIENCE

Researcher

Laboratory of Adsorption and Ion Exchange

2018 - 2021

- *Supervised and trained graduate students, interns, and youth in the lab and field on research techniques, including experimental design, data collection, and analysis.*
- *Improved data analysis by automating the analysis of adsorption and characterization data using the Python programming language.*
- *Developed a GUI for adsorption data acquisition and treatment, which was integrated with hardware drivers to provide a simple, user-friendly interface that improved the efficiency of the research team.*
- *Implemented multicomponent adsorption prediction algorithms written in python and c++ using pybind11 as a bridge to allow more rapid iteration on the code to quickly obtain new results and improve the project.*

Full Stack Software Developer

Engineering Simulation and Scientific Software (ESSS)

2021 - current

- *Implemented backend caching using Redis, which allowed for a faster response time and reduced the load on the server.*

- *Implemented a Python script which exports a report to .xlsx, saving the user hours of manual work.*
- *Created new services that use RedisSMQ for event handling by writing the service code in Python and following the company's best practices for development. This resulted in the creation of a new service that currently runs in production.*
- *Developed custom Angular components to efficiently manage dynamic input of arrays and numerical data, resulting in streamlined data processing and improved user experience.*
- *Created an automated formatting workflow for pull reviews using github actions and using mypy, black and autoflake as checkers.*
- *Enforced mypy and high pytest coverage on reviews, which improved the quality of code being merged and enforced strong types, increasing the robustness of the codebase.*
- *Implemented database migration testing for a backend python application by using Oracle and PostgreSQL as the testing databases. This was accomplished by writing unit tests, using alembic to create the objects, and running the tests.*

EDUCATION

B. Tech. Chemical Processes

Federal University of Technology - Paraná
Toledo, PR, BR

2011 - 2016

B.S. Chemical Engineering

Study abroad, University of Nevada, Reno
Reno, NV, US

2014 - 2015

M. Sc. Chemical Engineering

State University of Maringá
Maringá, PR, BR

2016 - 2019

RELEVANT SKILLS

Python, PostGRESQL, OracleSQL, Redis, Docker, Kubernetes, Typescript, Angular2, RxJS, State management, git version control, github actions