Wilson W. Oliveira de Souza

I am an undergraduate student in Geophysics and Computer Science with a focus on Seismology and Processing under Prof. Dr. Ellen de Nazaré at the Federal University of Pará (UFPA) in the Seismic Processing Analysis Laboratory (ProSisLab) and I have 3 years of experience in both front-end and back-end web development. My interests include seismic processing and analysis differentiable numerical simulators machine learning numerical modeling automatic differentiation and optimization theory as well as full-stack web development with a variety of languages and frameworks

Experience

O Meteorological Data Analysis in Tatuoca 'Filtering data with Python, Pandas, and Excel.'

The project was developed from a meteorological data backup on Tatuoca Island to assist in the seismic processing of tides. The seismic data is collected by a device called Geode and due to its sensitivity, Geode detects a lot of disturbances and collects a lot of noise. To reduce this noise, we filter Winds, Wind Direction, Rain, and Solar Radiation. Python was used to read and filter the data, and Excel for universal data visualization.

O Adelewa Criações - Web Development 'Front-End and Back-End Development'

This project involves creating a responsive website for a company that manufactures crafts and religious items. The website was designed with a structure that resembles a gallery rather than a typical store. It was developed using Bootstrap, CSS/SCSS, and JS technologies for functions such as buttons, carousels, sliders, and galleries, as well as navigation functions. The project will also include databases programmed in PHP in the future.

Education

Academic Qualification

Federal University of Pará (UFPA)

Bachelor's Degree in Geophysics,

Pará 2022–2025

Faculdade Ideal - Faci Wyden

Pará 2023–2027

Bachelor of Computer Science,

Extension Project 'Geocientes Scientific Outreach Project.'

Projects

The "Geocientes" project is an outreach project in the Geosciences field, studying everything from the Earth's interior to space.

Tutoring 'Monitored subjects for students'

Physics II and Experimental Laboratory I/II

Technical and Personal Knowledge

- **Programming languages (Data Science):** Python, C/C++ and JavaScript. Knowledge of Frameworks: PyTorch, TensorFlow, Scikit-Learn, NumPy/Matplotlib/SciPy, D3js, Git, and Geo/Pandas.
- **Programming languages (Web Development):** HTML, CSS, JS, React, Bootstrap, Node.js, PhP and MySql.
- Knowledge of Industrial Software: Matlab (Basic), Octave (Basic), OpendTect (Basic), QGIS (Intermediate), PowerBi (Intermediate), MS Office products including Project and Excel (Advanced).
- Computer Skills: Assembling and disassembling machines. Knowledge of Computer Networks, Basic and Advanced hardware repairs, Familiarity with Linux and Windows operating systems.
- O Business Knowledge: Good presentation, teamwork skills, effective communication.
- O Language Skills: Fluent in English and able to communicate in German.
- Other: Ability to write technical reports with proper citations and references.

Courses and Training

- Getting Started with Python GIS: Applying Python for Geoprocessing: This course on Python GIS
 enhances capabilities and applications in geoprocessing.
 - It covers how to use the language and some of its modules, as well as external modules for processing and automating data, generating results that can support routine activities in geoprocessing. (Udemy Academy: 10h 27m)

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