Raimundo Oscar de Sousa Jr.

E-mail: raimundooscarjr@gmail.com * Phone: +55 93 98103-2118

Github: github.com/raimundo1994 * Linkedin: linkedin.com/in/oscarfilho84672b103

Residence in: Santarém, Pará, Brasil * Year of birth: 1994

Education

Master's in Geophysics

 $National\ Observatory$

Graduate Program in Geophysics

2020 - 2023

Project: Interpretation of magnetic data on oceanic crust at low latitudes.

Bachelor's in Geophysics

Federal University of Western Pará

Institute of Engineering and Geosciences

2017 - 2019

Project: Crustal structure of the southeastern portion of the Amazonian Craton: joint inversion of receiver function (RF) and dispersion of surface waves (DSW).

Bachelor's in Earth Sciences

Federal University of Western Pará

Institute of Engineering and Geosciences

2013 - 2017

Project: Utilization of binary segmentation for improved interpretation of physical properties of a well geophysical profile in a hydrocarbon zone.

Work Experience

Volunteer Teacher

2016

EMACIPA Project

Santarém - Pará

• Voluntary physics teacher for the EMACIPA project, which aimed to assist and prepare students from public schools for the ENEM (Brazilian National High School Exam)

Private Tutor 2019

Self-Employed

Santarém - Pará

• Private tutor in physics and mathematics for elementary and high school students.

Administrative Director

2017-2018

Prospecta Jr.

Santarém -Pará

• Serving as the Administrative Director at the Geophysics Junior Company of the Federal University of Western Pará, I had the opportunity to enhance my leadership and teamwork skills.

Geophysicist

2020 - **

Freelancer

Santarém -Pará

• Freelance and self-employed geophysicist, specializing in data processing, analysis, and interpretation, with a focus on potential field data.

Extracurricular Activities

Automobile Mechanic Course

2013

SENAI

Santarém-Pará

The Automobile Mechanic course aims to provide professional qualification in the maintenance of light vehicle mechanical and electro-electronic systems, following technical standards, quality, environmental, health, and safety guidelines at work.

Python Course

2022

Souk Analytics

Online

Comprehensive course on the Python programming language, introducing fundamental and advanced concepts.

Essential Programming Logic

2022

DIO Online

Programming logic is the way a developer understands communication to program a function. It uses algorithms, which are well-established sequences of steps, such as a recipe.

Introduction to Git and GitHub

2022

DIO Online

In this course, I learned about the history of Git and how it became essential for optimizing developer projects. I also became familiar with its main commands, how the platform works, and how it can simplify your work.

Ground Penetrating Radar (GPR) Data Acquisition, Processing, and Modeling Course 2017

UFOPA Santarém-Pará

Designed to provide participants with knowledge and skills to work with Ground Penetrating Radar (GPR) data. During the course, students will be introduced to the fundamental principles of GPR data acquisition, signal processing, and subsurface modeling.

Seismological Station Handling Course

2018

UFOPA Santarém-Pará

Participants will be introduced to the fundamental principles of seismology, learn about seismic instrumentation, and acquire the skills needed to operate and handle a seismological station.

Predictive Geophysics for Dams and Piles Course

2023

SINGEO-MG / CREA-MG

Online

This course aims to provide participants with the knowledge and tools necessary to apply geophysical methods in the evaluation and monitoring of containment structures for waste materials.

Python for Geology & Geoscience Course

2023

Petroleum Engineers Associantion - PEA

Online

The goal of this course is to equip participants with essential knowledge and tools for applying the Python programming language in geological and geophysical studies.

Publications

Utilization of binary segmentation for improved interpretation of physical properties of a well geophysical profile in a hydrocarbon zone (2017)

Abstract

Society of Exploration Geophysicists

Raimundo Oscar de Sousa Júnior (UFOPA), Cauã da Silva Chagas dos Santos (UFOPA), Beatriz da Gama Silva (IEG, UFOPA), Aldenize Ruela Xavier (UFOPA) e Aumir da Silva Viana(UFOPA), DOI: 10.1190/sbgf2017-233

Lithostratigraphic correlation between Pleistocene deposits in the Brazos-Trinity region, Gulf of Mexico (2020)

 $Journal\ Article$

Brazilian Journals of Development

AL Alves, RO de Sousa Júnior, CSC dos Santos, AR Xavier, DOI:10.34117/bjdv6n3-054

Crustal structure of the southeastern portion of the Amazonian Craton and the northern portion of the Araguaia Belt by joint inversion of receiver function (RF) and dispersion of surface waves (DOS) (2018)

Conference Paper

Simpósio Brasileiro de Geofísica

R. Júnior, C. R. D. Trindade, J. E. Soares, DOI: 10.22564/8simbgf2018.115

Interactive methods for solving nonlinear systems and their basins of attraction (2018)

Abstract

Essentia Editora

Santos, C. S. C; GOES, J. F.; SOUSA JUNIOR, R. O

Digital Image Processing and Analysis (PADI): grain/non-grain quantification and porosity estimation from thin section images (2017)

Abstract Society of Exploration Geophysicists

Viana, A.S; SOUSA JUNIOR, R. O.; Santos, C. S. C; MENDES, A. C, DOI:10.1190/sbgf2017-179

Temporal Hydrogeological Mapping of the Alter do Chão Formation using Vertical Electrical Sounding and Electrical Profiling on the UFOPA Tapajós Campus (2018)

Conference Paper Simpósio Brasileiro de Geofísica

Souza L. G., Barros A. C. S. P. C., Sousa Junior R. O., Rufino, C. S., Silva H. T. A., Siqueira Neto, A.C.

Information Technology Skills

Programming LanguagesPython, Julia LATEX, SQL, MatLabOffice/Design ToolsExcel, Word, PowerPoint, Canva, Figma

Geoprocessing QGis, ArcGis, Google Earth

Data Visualization Plotly, Pyvista, Matplotlib, Boker, Seaborn, PowerBI

Professional Skills

Geoelectrical Surveys (SEV, CE, GPR)

Resistivity Meter- Super

Magnetic Surveys

Gravimetric Surveys

Gravimetric Surveys

Gravimeter: G-857

Gravimeter: Scintrex

Processing/Interpretation of Geophysical Well Profiles

Processing/Interpretation of Seismic/Seismological Data

Python, Seismic Unix

Creation of Thematic Maps (Geophysical/Geological) QGIS, ARCGIS, OASIS

MONTAJ, Python

Topographic Surveys

Using Total Stations and

Theodolites

Field Practices in Geology and Geophysics GPS, Precision Compass

Interpersonal Skills and Strengths

	Self-Confidence Planning and Organizational Skills Autonom	y
Adaptability Problem-Solving	Attention to Detail Teamwork Eagerness to Learn New Skills	
Good Communication Information Management Diplomacy Active Listening Patience		

Language Proficiency

English Advanced - Proficient in grammar and vocabulary, able to discuss

specific topics.

Portuguese (Brazilian) Native