



MARCELO ALBUQUERQUE



I am a petrophysicist with a unique combination of skills in applied machine learning, statistics and reservoir engineering. I am passionate about analyzing and extracting value from data, using exploration and visualization tools and deploying solutions for business problems.

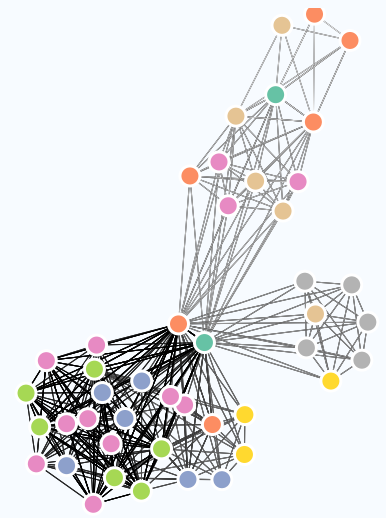
Currently searching for a position that allows me to build tools leveraging a combination of visualization, machine learning, and software engineering to help people explore and understand their data in new and useful ways.

EDUCATION

- 2020
|
2018
- **MsC, Computer Science**
UFRJ  Rio de Janeiro, RJ
 - Master Thesis: Prediction of Petrophysical Properties Using Machine Learning and Hierarchical Multi-Task Linear Models
- 2008
|
2003
- **B.S., Electronics Engineering**
ITA  São José dos Campos, SP
 - Diploma Thesis: Applications of Time-Domain Back-Projection SAR Processing in the Airborne Case


INDUSTRY EXPERIENCE

- Present
|
2018
- **Data Scientist**
Petrobras Research Center  Rio de Janeiro, RJ
 - Develop Machine Learning models to predict Petrophysical Properties
 - Build REST APIs and python/R packages to access and explore petrophysical data
 - Enhance data storage and image processing workflows for microtomographic images
 - Design petrophysical data visualization tools and web apps
 - Develop reservoir simulation python packages to deploy and update petrophysical models using history matching bayesian methods
- Present
|
2015
- **Petrophysicist**
Petrobras Research Center  Rio de Janeiro, RJ
 - Coordinate the execution of Routine and Special Core Analysis (SCAL) data gathering for pre-salt and other strategic fields of Petrobras
 - Analyze SCAL experimental data and provide meaningful petrophysical rock parameters for reservoir simulation
 - Simulate and research physical phenomena and improve data acquisition methods

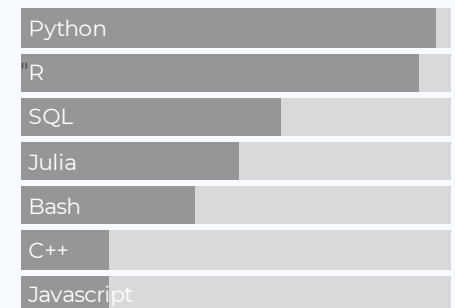


View this CV online with links at
mralbu.github.io/cv

CONTACT

 marceloralbuquerque@gmail.com
 github.com/mralbu
 mralbu.github.io
 linkedin.com/in/mralbu

LANGUAGE SKILLS



Made with the R package
[pagedown](https://github.com/josiahpage/pagedown).

Last updated on 2020-09-11.

- 2015
|
2010

Reservoir Engineer
 Petrobras 📍 Aracajú, SE
 - Reservoir Engineer at the Sergipe-Alagoas Business unit (UO-SEAL)
 - Management of mature oil and gas fields in the Sergipe Alagoas basin
 - Oil Field Production and Reserves forecasting with analytical and numerical simulation tools (CMG Software Suite)
- 2010
|
2009

Petroleum Engineer
 Petrobras 📍 Salvador, BA
 - Petroleum Engineering in-company specialization at Petrobras University
- 2008
|
2008

Engineering Intern
 Orbisat 📍 São José dos Campos, SP
 - Developed a point-target simulator for a ground-based weather radar, using Synthetic Aperture Radar concepts
 - Supported the software development team evaluating and implementing radar signal processing algorithms in IDL



RESEARCH EXPERIENCE

- 2007
|
2007

Diplomand Researcher
 Deutsches Zentrum für Luft und Raumfahrt (DLR) 📍 Munich, DE
 - Implemented a Synthetic Aperture Radar (SAR) processor in IDL and C / pthreads
 - Investigated and developed applications of time-domain SAR processing: direct-geocoding and processing of curvilinear acquisition trajectories
 - Researched a novel SAR acquisition geometry, Circular SAR



PUBLICATIONS

- 2018
|
2018

Estimation of Capillary Pressure Curves from Centrifuge Measurements Using Inverse Methods
 Rio Oil & Gas

 - Authored with Felipe M. Eler, Heitor V.R. Carmargo, André L.M. Compan, Dario A. Cruz and Carlos E. Pedreira.
- 2008
|
2008

Applications of Time-Domain Back-Projection SAR Processing in the Airborne Case
 European Conference on Synthetic Aperture Radar

 - Authored with Pau Prats and Rolf Scheiber