

## ABOUT

A professional with four years of experience in R&D and geoscientific software development projects, looking forward to solving scientific-industrial problems by developing creative solutions through highly adaptive and proactive work. I have large experience in working at multidisciplinary projects for technological innovation, especially those related to geological modeling and applied research. I am always curious about learning new topics and open to new challenges.

**Languages: Portuguese (native) | English (fluent) | Spanish (intermediate)**

## CURRENT ACTIVITY

### GEOLOGIST AT PETROSOFT DESIGN:

November 2021 – Present

- Geological consultancy;
- Algorithm development
- Project proposals;
- Software testing and QA/QC;
- Client support;
- Scientific and technical report writing.

## EDUCATION

### DOCTORAL DEGREE IN GEOSCIENCES

2024 | Universidade Federal Fluminense – UFF

### MASTER DEGREE IN GEOLOGY

2019 | Universidade Federal do Rio de Janeiro – UFRJ

### DEGREE IN GEOLOGY

2016 | Universidade Federal do Rio de Janeiro – UFRJ

### ONE-YEAR INTERNATIONAL UNDEGRADUATE SCHOLARSHIP

2014 | University of Queensland – UQ – Australia

## RECENT ACTIVITY

### PHD RESEARCHER AT LOOP (UFF):

March 2019 – December 2022

- Data interpretation, spatialization and modeling (well log, seismic, geochemical and other geological data);
- Software development – team management, conceptual model, code writing (Python) and QA/QC;
- Meeting with company's decision-makers to align needs and maximize the integration between our plug-in to the main framework;
- Sequence stratigraphy and 3D stratigraphic modeling (Espírito Santo Basin);
- Mentoring undergraduate students (geology, geophysics and computer science students).

#### STUDY AREAS

Geological modeling  
Geoprocessing  
Stratigraphy  
Geochemistry  
Geophysics  
Data science  
Machine Learning

#### TECHNICAL SKILLS

Python programming  
GIS  
G&G Software  
Software testing  
Versioning (git)  
Agile development

#### PERSONAL SKILLS

Creative  
Problem-solver  
Innovate  
Proactive  
Team worker  
Leader

## SCIENTIFIC PUBLICATIONS

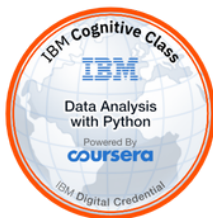
- 2024** **BIONE F.R.A.**, Venancio I.M., Santos T.P., Belem A.L., Rangel B.R., Souza I.V.A.F., Spigolon A.L.D., Albuquerque A.L.S. **Estimating total organic carbon of potential source rocks in the Espírito Santo Basin, SE Brazil, using XGBoost.** Marine and Petroleum Geology, 162, 106765. <https://doi.org/10.1016/j.marpetgeo.2024.106765>
- 2023** Santos T.P., Lisboa L.P., Carreira V., **Bione F.R.A.**, Venancio I.M., Bernardes M.C., Belem A.L., Díaz R., Moreira M., Lopes A.A.O., Santos T.L., Souza I.V., Spigolon A.L.D., Albuquerque A.L.S. **Orbitally-driven Paleogene to Neogene deposition in the western South Atlantic (Espírito Santo Basin) and its correlation with global sea level.** Sedimentology, 2023. <https://doi.org/10.1111/sed.13104>
- 2022** Venancio I.M., Santos T.P., **Bione F.R.A.**, Belem A.L., Bernardes M.C., Díaz R., Moreira M., Carreira V., Spigolon A., Souza I.V.A.F., Albuquerque A.L.S. **Preservation Factors during Cretaceous Oceanic Anoxic Events in the Espírito Santo Basin, Southeast Brazil.** Geosciences, 12(10), 251. <https://doi.org/10.3390/geosciences12100351>
- 2022** Venancio I.M., Belem A.L., Santos T.P., Lessa D.O., **Bione F.R.A.**, Díaz R., Bernardes M.C., Souza I.V.A.F., Coutinho L.F.C., Albuquerque A.L.S. **Temporal and spatial differences between predicted and measured organic carbon in South Atlantic sediments: constraints to organic facies modelling.** Marine and Petroleum Geology, 138, 105524. <https://doi.org/10.1016/j.marpetgeo.2022.105524>
- 2021** Santos T.P., **Bione F.R.A.**, Venancio I.M., Bernardes M.C., Belem A.L., Lisboa L.P., Franco D.R., Díaz R.A., Moreira M., Leonardo N.F., Souza I.V., Albuquerque A.L.S. **Late Cretaceous astrochronology, organic carbon evolution, and paleoclimate inferences for the subtropical western South Atlantic, Espírito Santo Basin.** Cretaceous Research, 129, 105032. <https://doi.org/10.1016/j.cretres.2021.105032>
- 2019** **Bione F.R.A.**, Bongioioli E.M., Mendes J.C., Roland C.L. 2019. **Geochemistry, Sm-Nd isotopes and SHRIMP U-Pb geochronology of the Morro do Coco Granite (RJ, Brazil): another piece of the post-collisional magmatism of the Ribeira Belt.** Braz. J. Geol., 49(3): e20190010. <http://dx.doi.org/10.1590/2317-4889201920190010>.

## REGISTERED PATENTS

- 2023** Albuquerque, A.L.S., Venancio, I.M., **Bione F.R.A.**, Abreu, P.V., Couto, L.L., Moreira, M., Bernardes, M.C., Belem, A.L., Santos, T.P., Díaz, R., Souza, I.V.A.F., Spigolon, A.L.D. 2021. **Método de determinação do conteúdo, qualidade e maturação da matéria orgânica em ambiente marinho para exploração de poços de petróleo.** Instituto Nacional da Propriedade Industrial, Brazil. Depositors: Petróleo Brasileiro S.A., Federal Fluminense University. Attorney: Francisco Carlos Rodrigues Silva. BR 102021025711-3 A2, 2023. Deposit date: December 18th 2021. National Publication date: June 20th 2023.
- 2023** Albuquerque, A.L.S., Venancio, I.M., **Bione F.R.A.**, Abreu, P.V., Couto, L.L., Moreira, M., Bernardes, M.C., Belem, A.L., Santos, T.P., Díaz, R., Souza, I.V.A.F., Spigolon, A.L.D. 2021. **Method for determining the content, quality and maturation of organic matter in marine environment for exploration of oil wells.** United States Patent and Trademark Office, United States. Patent: Utility model. Registry number: US2023/0195966A1, 2023. Deposit date: December 19th 2022. Publication date: June 22nd 2023. Financing institutions: Petróleo Brasileiro S.A., Federal Fluminense University.

## ISSUED ONLINE CERTIFICATES

2021



Data Analysis with Python  
IBM - Issued by Coursera  
13 hours



Exploratory Data Analysis for Machine Learning  
IBM - Issued by Coursera  
8 hours

## OTHER COURSES

- 2021** **DIONISOSFLOW TRAINING**  
DIDIER GRANJEON and BENOIT CHAUVEAU - IFP ENERGIES NOUVELLES  
6 hours
- 2019** **STRATIGRAPHIC FORWARD MODELLING: A SHORT INTRODUCTION TO DIONISOSFLOW**  
BENOIT CHAUVEAU - IFP ENERGIES NOUVELLES  
16 hours
- 2016** **OFFSHORE DRILLING TECHNIQUES**  
ALPHONSE GRYNKO - TOTAL Professeurs Associés & TOTAL E&P do Brasil  
20 hours