

# Renan Larrieu de Abreu Mourão

---

Address: Rua Ipiranga 13 – Laranjeiras – Rio de Janeiro  
E-mail: [renanlarrieu@gmail.com](mailto:renanlarrieu@gmail.com)  
LinkedIn: <https://www.linkedin.com/in/renanlarrieu/>  
Site: <https://renanlarrieu.github.io/>

Cellphone: +55 (21) 99120-2579  
Date of birth: 15/11/1999  
GitHub: [renanlarrieu](#)  
Lattes: [renan \(cnpq.br\)](#)

## Purpose

Internship in the area of projects related to technology, IT, datascience.

## Professional Summary

Electrical Engineering student with an emphasis on Power Systems at UERJ. I've been working since 2018 in the Rocket Group of Rio de Janeiro (GFRJ) - aerospace team of university model rocket linked to UERJ. I became manager of one of the team's subsystems in 2019, being responsible for managing projects, tasks and objectives. In my management, the team received 1st place in the Latin American Space Challenge competition.

## Experience / Technical Projects

### IEEE | 2020 – Current

• Member of PES (Power Energy Society) & IAS (Industry Applications Society):

I am a researcher in the area of renewable energy, being linked to the project of a solar charging station to recharge student cell phones on the campus of UERJ - Maracanã.

In addition, I participate in:

→ Simulation of circuits, systems and electronic components related to energy conversion / output stabilization of the solar charging station project;

→ [Management of the development / versioning platform for the team's codes and algorithms.](#)

→ Volunteer in the organization and participation in events such as the annual electrical engineering week at UERJ.

### GRUPO DE FOGUETES DO RIO DE JANEIRO | 2018 – Current

• Avionics Subsystem Manager:

In general, I fulfill the function of managing the activities of this team subsystem (avionics), in addition to developing projects for the current competitions and preparing technical activity reports in order to contribute to the flow of information within the team and submission of notices for project funding.

In addition, I participate and lead the:

→ Instrumentation of engine tests;

→ Development of algorithms / codes to control communication / radio link;

→ Treatment of physical data captured by sensors, generated by communications;

→ Integrated circuit board (PCI) design;

→ Simulation of circuits, electronic components, communication of embedded systems;

→ [Development management/ versioning platform for the team's codes and algorithms.](#)

## SCIENTIFIC RESEARCH VOLUNTEER UERJ | 2020 –

### Current

- Researcher

Project: Development of a rapid prototyping platform for simulations in real time from an FPGA, with the aim of emulating circuits of a complex nature linked to physical systems common to the field of Electrical Engineering for prediction and later behavior control.

### Academic Degree

#### UNIVERSIDADE DO ESTADO DO RIO DE JANEIRO

- Electrical engineering

→ Start: February / 2018

→ Completion forecast: December / 2022

### Idioms

**English:** Pos-Intermediate or Level B2-C1

**Portuguese:** Native

### Skills and Knowledge

- Programming Verilog, VHDL, C++ e Python (Librarys like Numpy, Matplotlib, Pandas)
- Eagle PCB Design / Proteus / LTSPICE / PSIM
- Windows/Linux
- GitHub/Git
- DataScience

### Complementary Information

• 1st place in the 3km category in the Latin American Space Challenge (LASC) competition in 2019, during my tenure as manager. ([Journalistic Interview by GloboNews](#))

• Participation in Olympics such as OBF (Brazilian Physics Olympics) and OBM (Brazilian Mathematics Olympics).

• [SEMIC-UERJ 2020](#) participation in the academic presentation of a real time simulator implementation project.