

Lukas Müller

Electrical Engineering, Universidade Federal do Rio de Janeiro (UFRJ)

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Skills

Programming Languages | Python, Flask, JavaScript, Node.js, C/C++, SQL, HTML, CSS

Languages | Portuguese (Native), English (Fluent), French (Basic)

Experience

JGP Asset Management | Data Engineer Intern

January 2021 -

- Assist in the development of pipelines to acquire, process and store data (ETLs).
- Make documentation of operation and data stored internally.

Signal Processing Laboratory (LPS - UFRJ) | Researcher

August 2020 -

- Image analysis using CNN (Convolutional Neural Network) to diagnose tuberculosis.
- This project aims to solve a public health issue in the socioeconomic context of the BRICS countries.

PELS/IEEE Student Branch chapter UFRJ

July 2020 -

- Project Coordination member where we develop Power Electronic projects, and where I work mostly programming the control and actuation of the circuit on the STM 32 microcontroller using C.
- Marketing Coordination member where we develop websites using Node.js, HTML and CSS to the Student Chapters and to IEEE-UFRJ Branch.

Power System Laboratory (LASPOT - UFRJ) | Researcher

January 2019 - July 2020

- Developed a GUI using C++ to create, save and edit power systems single-line diagrams.
- Created a connection between the C++ Qt Creator GUI to the legacy C++ Borland and Delphi software using Tcp Sockets.

Pré-Vestibular Samora Machel (UFRJ) | Teacher

March 2019 -

- Teacher of high school classes, preparing students for college contests at the end of high school.
- The pre-university course contemplates 600 low-income students who live in the surroundings of Ilha do Fundão in Rio de Janeiro.

Projects

Liteboard.io 🌐

Tech Stack | JavaScript, HTML, CSS

- Liteboard is powered by WebRTC and uses the Janus implementation of a Selective Forwarding Unit (SFU) to allow multiple participants per lecture while ensuring the lowest latency available on browsers. We host our own TURN server to guarantee support for users in any kind of network.
- Liteboard is a free, browser-based lecturing platform for anyone who wants to quickly setup a real-like classroom with State-of-the-Art drawing tools and webcam/audio broadcasts.

Intelligent Battery Charger 🌐

- Intelligent charger Project, being a more sustainable and efficient solution, enabling adequate loading lead-acid batteries, thus aiming to increase the service life and decrease discards.

Education

Universidade Federal do Rio de Janeiro (UFRJ) | Bachelor of Electrical Engineering

February 2018 -

December 2022

Physics 3 Monitor (Electricity and Magnetism) in the second student period of 2019;

Top 5% student - Calculus 1 Award;