

# Wesley Victor da Costa Vieira

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## ABOUT ME

I utilize technologies such as JavaScript, Node.js, PHP and MySQL, having previous experience with Digital Ocean's VPS and the Heroku cloud platform. Given my formation in a STEM field, I also have experience with data analysis using tools such as Python and SQL. I'm passionate about learning and I have a special interest on back-end web development.

## EDUCATION

**Universidade do Porto (September 2018 – June 2021)**

**Major:** Bachelor's Degree in Physics

**Minor:** Computer Science

**CS Coursework:** Data Structures and Algorithms, Algorithm Design and Analysis, Web Technologies, Databases, Functional Programming

## TECHNICAL SKILLS

**Programming languages:** JavaScript, Python, Java, PHP

**Front-end development:** HTML5, CSS3, Bootstrap4, JQuery

**Back-end development:** Laravel, Node.js, Express, Flask (familiar)

**Databases:** MySQL, MongoDB (familiar)

**Data analysis:** pandas, numpy, matplotlib, SQL

**Others:** Git, Bash

## LANGUAGES

**Portuguese** (Native)

**English** (Fluent)

**German** (Basic)

## PERSONAL PROJECTS

**Personal blog** - [Github](#) | [URL](#)

- ✓ Developed a personal blog and deployed it on the Heroku cloud platform.
- ✓ Utilized Node.js and Express in the back-end, and MySQL as the database.
- ✓ Used *handlebars* as the template engine.
- ✓ Implemented the MVC design pattern across the application.
- ✓ Code highlighting was implemented with *PrismJs* and support for mathematical notation (LaTeX) was implemented with *MathJax*.

**Wikipedia Covid-19 Graphs Generator** - [Github](#)

- ✓ Developed a Python script that parses the DGS website for daily Covid-19 reports and generates timeline graphs and summary tables with the goal of contributing to Portugal's Wikipedia page.
- ✓ *Beautiful Soup*, *requests* and *urllib* were used to find and download the reports.
- ✓ *pdfminer* was used to extract data from the PDF files and *pandas* was used for the data handling.
- ✓ Used *pytest* for unit testing.

**Origami** - [Github](#) | [URL](#)

- ✓ Developed a web application that allows users to write and store personal notes online.
- ✓ Used PHP as the server side language and MySQL as the database. Ajax (implemented with JQuery) was also used.
- ✓ Users can add, edit, delete and save locally (in a .txt file) all the notes created.

**Entenda Mais** - [Github](#) | [URL](#)

- ✓ Implemented the website for a science communication project called *Entenda Mais*.
- ✓ It has CRUD functionalities and readers can leave comments on each article.
- ✓ The project was developed using the PHP framework Laravel and MySQL.

## PROFESSIONAL EXPERIENCE

**Centro de Astrofísica da Universidade do Porto (CAUP)**

**February 2020 – December 2020**

I was part of an astronomy undergraduate research program at CAUP.

- ✓ Implemented a Python software using statistical tools such as Markov chain Monte Carlo to improve measurement of uncertainties on velocities of stars with the goal of setting constraints on dark matter present on ultra-faint dwarf galaxies.
- ✓ Utilized the following Python libraries: *numpy*, *pandas*, *matplotlib* and *astropy*, among others.
- ✓ Used Object Oriented Programming in order to make the final code more readable and scalable.
- ✓ Wrote a written report highlighting the results obtained.