

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. I also have experience with data analysis with Python and SQL. I'm passionate about learning and I have a special interest on back-end web development.

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)

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** (facebook.com/entendama1s).
- ✓ 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 – October 2020

I was part of an astronomy undergraduate research programme 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.
- ✓ Applied tool to find the velocity dispersion and the average line-of-sight velocity of a ultra-faint dwarf galaxy, obtaining results with a 9% and 3% relative error compared to values on the scientific literature, respectively.
- ✓ Utilized Object Oriented Programming to treat each star's spectrum as an individual component.
- ✓ Used data analysis libraries such as *numpy*, *pandas*, *matplotlib*, and the astronomy library *astropy*.

EDUCATION

Universidade do Porto (September 2018 – June 2021)

Major: Bachelor's Degree in Physics

Minor: Computer Science

CS Coursework: Data Structures and Algorithms, Web Technologies, Databases, Functional Programming