SOFTWARE ENGINEERING STUDENT @ FEUP · PORTO, PORTUGAL

□ (+351) 969533104 | ■ eduardocribeiro.com | □ EduRibeiro00 | □ eduardocribeiro

Education

Faculty of Engineering of the University of Porto (FEUP) ✓

Sep 2017 - Present (Exp. Jul 2022)

Porto, Portugal

Integrated Masters (BSc + MSc) in Informatics and Computing Engineering

- Current cumulative GPA: 18.42 / 20; currently enrolled in the 4th year
- Relevant coursework: Systems Architecture, Distributed Systems, Web App Development, Algorithms & Data Structures, Artificial Intelligence
- Received a Merit Scholarship in the 2018/19 Academic Year, given to the best students in Portugal.
- Part of the Informatics Engineering Student Branch G, where I organized and participated in several events and workshops.

Jobs & Experiences _

Research Assistant - "Big Data for Energy"

Feb 2020 - Present

Porto, Portugal

INESC TEC 🗹

• Developing a platform to foster energy analytics for R&D institutions, by automating energy and weather data collection and management.

- Automated energy data collection by creating scripts that periodically fetch data from APIs of electricity data sources in Europe.
- Implemented detection of missing values by creating software that monitors DB with 130+ tables, each one with an average of 3 million rows.
- · Allowed registered users to extract desired data by building an authentication layer and a REST API, and by helping create a user interface.
- Organized and presented a hands-on workshop for the INESC TEC Power and Energy Systems team, to showcase the tool for their future usage.
- Main technologies used: Python, Django, Pandas, Apache Cassandra, RabbitMQ, Celery, Nginx, Vue.js, Docker, GitLab CI/CD.

Teaching Assistant Feb 2021 - Present

FACULTY OF ENGINEERING OF THE UNIVERSITY OF PORTO (FEUP)

Porto, Portugal

Helping students in the IART - Artificial Intelligence subject with search and optimization algorithms, and Machine Learning exercises.

Software Engineer Intern

Jul 2020 Coimbra, Portugal

Critical Software 🗗

- Learned about the methodologies and tools used in critical projects, such as software for airplanes, trains and banks.
- Built a real time chat service using Java and Kafka.
 Built an automatic encryption/decryption system for smart meter data with Java, SSL and XML documents.

Projects

Labcentric - Monitoring and Management System for Laboratories 🗹

Oct 2020 - Present

PHP, Laravel, Javascript, HTML, CSS, PostgreSQL, Python, Flask, OpenCV, Docker, Heroku, Gitlab CI/CD

Team of 8 people

- Team leader of a project developed for the Dr. Ricardo Jorge National Health Institute 🗹.
- Developed web app for management of reagents, samples, procedures and executions, results, and other important data for the institute.
- Developed a Computer Vision module that identifies QR Codes on reagents and monitors the scientist's steps when executing a procedure.
- Integrated a CI/CD pipeline for linting, testing, and deploying the application on a Heroku server.

Distributed Backup Service for the Internet

May 2020 - Jun 2020

Team of 4 people

JAVA, SHELL

• Developed a distributed P2P system with the purpose of backing up files divided in chunks in other peers.

- Protected the system against faults and raised its stability and scalability by using and implementing the Chord Protocol.
- · Assured the privacy and integrity of the messages, and increased system security by implementing secure communication channels with JSSE.
- · Achieved high degrees of concurrency and parallelism by using thread-pools and non-blocking I/O.

Covid Forecast Tool 🗹

May 2020 - Jun 2020

PYTHON, JUPYTER NOTEBOOK, SKLEARN, PANDAS, NUMPY, MATPLOTLIB, SEABORN, KAGGLE DATASETS

Team of 3 people

- Created a tool that predicted Covid-19 cases and deaths for various countries/regions, with an average of around 90% accuracy, by training several regression models using Covid-19 data from a Kaggle dataset that contained the confirmed, death, and recovered cases for each day.
- $\bullet \quad \text{Compared several Machine Learning algorithms, such as Neural Networks, Support Vector Machines, K-Nearest Neighbours and Random Forest.}\\$

OpenCX - Mobile App for Conferences

Oct 2019 - Jan 2020

FLUTTER, SQLITE, GHERKIN, BLUETOOTH

Team of 4 people

• Contributed to an open source project by developing a mobile app for conferences, that allows the user to see the conference's program and to make a custom schedule, receiving push notifications when an event is about to start and also allowing BT scanning for near-by events.

Skills

Git, Java, Python, Django, Javascript, C/C++, HTML/CSS/PHP, Laravel, Node.js, SQL, REST API, OOP - Proficient

Technical Docker, React, Go, CI/CD, Agile/Scrum, Unix/Linux - Medium Understanding

NoSQL - Prior Experience

Languages Portuguese(Native), English(Full Professional Proficiency), Spanish(Limited Working Proficiency), French(Basic understanding)