PEDRO CASAL RIBEIRO

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PROFILES & PORTFOLIO

- https://www.linkedin.com/in/pedrocr83/
- https://github.com/pedrocr83
- www.pedro.world

SUMMARY & OBJECTIVES

Resourceful **Bioinformatics and Machine Learning Software Engineer** with +15 years experience in multiple industries with business acumen and the ability to translate strategic decisions into successful operational actions. Reputation for resolving problems and improving customer/team satisfaction and relations. Motivated to learn, grow and excel in applying data-curated traditional machine learning or deep learning solutions to business and health problems.

KEY SKILLS

- Experienced web, software and algorithm developer in multiple languages : **Python, R, Java, SQL, HTML5 & CSS3, Javascript** and **Bash.**
- Adept in using **Django, Vue.js, PostgreSQL** and leveraging **Docker** to deliver containerized applications.
- Skilled user of REST **APIs** and **ETL** integration into web, in-house and commercial applications.
- Skilled in **bioinformatics,** use of **HL7** messaging services, understanding of standards, data sources and tools used in **NGS** and **clinical genomics** .
- Experience in building, hyper parameter fine-tuning and deploying **machine learning models** in **production.**
- Understanding of popular ML frameworks such as **scikit-learn, Tensorflow** and **Keras** .
- Experience in **PySpark and Spark Streaming.**
- Follower of **CI/CD** best practices by using **git, unit testing** and **DRY** methodologies .
- **Collaborating** and **communicating** with key multidisciplinary stakeholders to ensure on-time delivery of **objectives** .
- Provider of ad hoc **coaching** to multidisciplinary team members in use of in-house and commercial applications.

WORK HISTORY

Bioinformatics Software Developer / Centro Laboratorial Germano De Sousa - Lisbon / 01.2019 - Current

- Creating and maintaining ETL pipelines for NGS data annotation from

various different databases (Clinvar, Ensembl, dbSNP, Varsome, OMIM, COSMIC, gnomAD). That data is be used in diagnosing germline and somatic mutations.

- Creating and maintaining end-to-end pipelines to analyze and report on metagenomic data with purpose of obesity treatment.
- Creating and maintaining software application using Docker, Django and PostgresQL for data management, analysis and clinical interpretation that is currently in production and continuous development. It is responsible for increasing team productivity and department revenue.

Full Stack Web Developer / Freelance - Lisbon / 01.2020 - Current

- Used Python, Django, Javascript, SQL, HTML5 and CSS3 to develop full stack end-to-end web solutions.
- Increased brand awareness and traffic for JOSE Gourmet and ATI Manel by using SEO from 60 to 90 (scale 1-100).

Bioinformatics Intern / Centro Laboratorial Germano De Sousa - Lisbon / 10.2018 - 12.2018

- Investigate feasibility of bioinformatics pipeline that was able to extract, manage and process microbiome data.
- Applied data science and leveraged understanding of metagenomics and its data to create population database.

LeadGen Specialist / LeadGenius - Remote / 10.2014 - 03.2018

- Developed sales leads to B2B customer through marketing lists and internet leads.
- Worked flexible hours in remote setting.

Director of Sales and Marketing / JOSE Gourmet - Lisbon / 11.2010 - 08.2014

- First employee and therefore responsible for all daily activities from warehouse management to sales and marketing efforts.
- Responsible for YOY 50% sales growth between 2010-2013 by pursuing door to door sales and adapting marketing and business strategies to reflect time of overall economic contraction.

Customer Support Analyst & Supervisor / SYKES - Shannon, County Clare / 01.2008 - 11.2010

- Monitoring team performance and helped them achieve company goals and managing staff expectations and needs.
- Assessing individual performance, providing feedback and implementation of improvement plans.
- Troubleshooting problems with software, hardware and networking for VAIO users.

Customer Service Representative / Vodafone - Lisbon / 01.2006 - 11.2007

- Maintained customer satisfaction by focusing and addressing customer needs and resolving concerns.
- Reached daily and monthly objectives & expectations whilst maintaining high quality deliverables.

EDUCATION

Munster Technological University - Cork / Expected in 08.2022
Master of Science: Artificial Intelligence

Polytechnic Institute of Setúbal - Barreiro / 12.2019
Bachelor of Science: Bioinformatics

Escola Secundária Quinta Do Marquês - Oeiras / 05.2002
High School Diploma

CERTIFICATIONS

- Hands-on Torrent Variant Caller Training. Jan 2021
- Python for Data Science and Machine Learning Bootcamp & NLP - Natural Language Processing with Python & Python and Django Full Stack Web Developer Bootcamp. Udemy - 2019-2020
- Algorithmic Design and Techniques, University of San Diego. edX - 2018
- Bioinformatic Methods I & II University of Toronto. Coursera - 2018
- Biology Meets Programming: Bioinformatics for Beginners, University of California San Diego. Coursera - 2018
- Gut Check: Exploring Your Microbiome, University of Colorado Boulder, University of Colorado System & University of California San Diego. Coursera - 2018