Caio C. Coelho

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EDUCATION

Western University - London, Ontario   09/2018 - 04/2022

HBSc in Computer Science, Minor in Software Engineering – 4.0 GPA

○ Western Gold Medal: Highest standing in the Honours Specialization in Computer Science degree
○ Dean's Honour List (2018 - 2021).
○ Scholarships: Meena and Amit Chakma Intl. Student Scholarship ($10,000), In-Course Scholarships Year II and III.

WORK EXPERIENCE

Junior Software Developer - GBatteries   05/2021 - Present

Ottawa, Ontario

○ Designed (in Figma) and developed an asset management dashboard using FastAPI (Python), React (TypeScript), and AWS DynamoDB to track battery cells and heat blocks, allowing the lab team to better organize physical assets.
○ Created a Python library that uses AWS Redshift to allow the research team to easily build and perform fast SQL queries on terabytes of data; resulted in queries 10X faster than their previous approach, and reduced server load.
○ Automated processes in Python and Apache Airflow, increasing the research team's work capacity.

Software Engineer - VidHug   05/2020 – 04/2021

London, Ontario

○ Designed, implemented, and tested new React (JavaScript) features that have been used by over 100,000 users.
○ Improved the web app's UX by fixing pain points in the user journey and by working alongside Customer Support to find and fix issues; gradually decreased the rate of support tickets received.
○ Worked on parts of the serverless AWS stack (Cognito, Dynamo) that enabled VidHug's exponential growth in 2020.
○ Analyzed >200,000 data points in Python (pandas, matplotlib) and presented findings to stakeholders using visualizations, allowing them to easily understand the data and make better business decisions.

Web Developer - JCC Construction   04/2018 – 08/2018

Guarapari, Brazil

○ Designed and developed the company's website (HTML, CSS, Python/Flask), and continuously improved it over the years through SEO and ads; resulted in 80% of all customers now visiting the site, earning the company >$500,000.
○ Recently upgraded the website to a serverless AWS model (API Gateway, Lambda), reducing load time by ~40%.

PROJECTS

StockTracker - Software Architecture Team Project   09/2021 – 12/2021

○ Created the Registry for a services-oriented finance app in Express.js; containerized and deployed registry and 4 services to AWS EC2; designed an architecture that allows for deployment of services with no downtime.

Voting Buck - Capstone Project   09/2021 – Present

○ Developed the backend for the web app: API in Express.js (TypeScript), Redis cache, PostgreSQL database, Nginx load balancer, and CI/CD for automatic test/build/deployment.
○ Deployed infrastructure and managed roles and security on AWS.

ModuLounge Smart TV - Team Project   09/2020 – 12/2020

○ Developed, in a group of 5, a cross-platform C++ & GTK smart TV app that runs on a Raspberry Pi and displays various live information such as weather and news. Used JIRA to manage user stories. Git Repo.

LEADERSHIP

VP of Projects - Western AI Club   05/2021 – Present

○ Led department of 89 members by re-structuring programs, offering events, hiring 18 Project Managers, and coaching teams in project planning; resulted in increased technical calibre of projects and clearer responsibilities.

Project Manager - Western AI Club   09/2020 – 03/2021

○ Led a team of 4 developers in building an ML model to classify songs into genres, deployed it to a Flask website.
○ Presented at the Canadian Undergraduate Conference on AI and published the paper "Music Genre Classification Using K-Nearest Neighbours And Neural Networks", elected top 5 (out of 20) papers by professors in the field of AI.

SKILLS

○ **Programming Languages:** Proficient in Python, JavaScript & TypeScript. Familiar with C/C++, Java, SQL, Go.
○ **Frameworks & Libraries:** Express.js, React, Flask, FastAPI, React Native, Next.js | Pandas, Matplotlib, Keras, Scikit-learn.
○ **Other:** Figma, Docker, Git, Unix, REST APIs, Algorithms, Data Structures, OOP, CI/CD.
○ **Certifications & Training**: Professional Scrum Product Owner (**PSPO I**), UI / UX Design Specialization (CalArts), Mobile App Development with React Native (Harvard), Concurrency in Go (UC Irvine).
○ **Hackathon Winner**: Hack Western 5 (600 participants).