

Alexandre Gouveia Rodrigues

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Education

- **University of Toronto:** BAsC in Electrical and Computer Engineering **SEP 2018 – APR 2023**

Hard Skills

- Angular, ARM Assembly, AWS, C, C++, C#, Circuit Design, CSS, Docker, Excel, Function Generators, Git, HTML, JavaScript, MATLAB, Multimeters, Multisim, .NET, Oscilloscopes, Portuguese, Python, MS Project, React, Spanish

Experience

BLOCKCHAIN DEVELOPER | UNIVERSITY OF TORONTO ENGINEERING CAPSTONE **SEP 2022 – APR 2023**

- Researched and analyzed the Hyperledger Fabric blockchain framework, including a study of the components, architecture, transaction flow, and chaincode for the successful implementation and integration of the project.
- Implemented the chaincode for the blockchain network through distinct and deterministic functions, enabling the network to validate and authorize only legitimate transactions.
- Developed a RESTful API using Express.js to expose chaincode functions to web applications and added user authorization using JWT tokens to ensure safe and controlled interactions with the blockchain network.
- Presented the project to supervisors and technical and non-technical audiences at a design fair, clearly conveying the project's objectives, design, achievements, and real-world benefits and implications.

SOFTWARE DEVELOPER INTERN | THOMSON REUTERS **SEP 2021 – SEP 2022**

- Refactored API endpoints of internal tools using C# on the .NET Framework to follow RESTful API best practices.
- Automated the onboarding process for new developers to internal tools by developing a RESTful API and leveraging AWS services to reduce time spent on manual tasks.
- Built a testing tool by creating a .NET web application with Angular that adhered to the OAuth protocol, empowering stakeholders to generate tokens and thoroughly test API authorization flows.
- Contributed to Agile development processes within the team by participating in and periodically leading daily stand-up meetings, spearheading sprint planning sessions, and facilitating sprint retrospective sessions.

SOFTWARE DEVELOPER ENGINEER INTERN | AMAZON **MAY 2021 – AUG 2021**

- Developed a mobile web feature using React to enable advertisers in visualizing campaign performance on Amazon.
- Completed a design review and conducted UAT and UI tests to ensure the best user experience before release.
- Executed an experiment to evaluate the feature's impact on user engagement and load times, which revealed widespread adoption and minimal latency, resulting in the feature's permanent integration into Amazon's website.

FREELANCE WEB DEVELOPER **MAY 2020 – SEP 2020**

- Created and published a Google Chrome extension with the support of APIs to facilitate user tab management.
- Designed an online portfolio using HTML, CSS, and JavaScript to showcase technical skills and projects to recruiters.

SOFTWARE ENGINEER | GEOGRAPHICAL INFORMATION SYSTEM (GIS) TEAM **JAN 2020 – APR 2020**

- Coded a solution to the 'Travelling Salesman Problem' and optimized a Dijkstra Algorithm implementation in C++ during the development of a GIS application similar to Google Maps.
- Upgraded the app's Graphical User Interface by using the EzGL graphics library to enhance the user experience.