

Emilio Roche

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Education

Dalhousie University

BACHELORS OF COMPUTER SCIENCE - SPECIALIZATION: COMMUNICATIONS AND CYBER SECURITY

Halifax, NS, Canada

Sep. 2017 – May 2022

Work Experience

Backend Developer (Volunteer)

EMPOWERED FUTURES

Calgary, AB

Oct. 2022 – Current

- Built Sign-up and Login Route features using Passport and JWT.
- Implemented Google Sign-In for creating accounts using Google OAuth 2.0.
- Developed User Schema to be used in MongoDB as documents, for multiple collections.
- Using Typescript to build RESTful API's with NodeJS and Express.

Junior Developer

SIMPLYCAST

Halifax, NS

Jan. 2021 – Apr 2021

- Improved Simply Cast application system stability by implementing bug fixes using Javascript and PHP.
- Used JavaScript and PHP to refactor inefficient existing software.
- Ran integration tests for functionality in the dev environment of the Simply Cast application.
- Collaborated with SimplyCast Product team to redesign and implement front-end technology on the Customer-facing application.

Software Developer

MACDONALD DETTWILER & ASSOCIATES (MDA)

Halifax, NS

May 2020 – Aug. 2020

- Used Typescript/HTML/CSS to implement a sub-section in a management window in the TRITON application.
- Applied Angular framework to assist in the development and defect maintenance of the TRITON application.
- Operated within a Scrum methodology to prioritize tasks and requirements to complete user stories during sprints.

Junior Programmer Analyst

PUBLIC SERVICE COMMISSION OF THE GOVERNMENT OF CANADA

Halifax, NS

Sept. 2019 – Dec. 2019

- Developed automated test scripts using Selenium to check validity of applications in development.
- Scaled automated test scripts to increase time and memory efficiency.
- Learned how to write clear technical documentation for a new application, Katalon Studio, that was introduced to the ASD Application Division.

Skills

Languages: Proficient in Java; Familiar with C, C#, PHP, JavaScript, TypeScript, Python, SQL, PostgreSQL

Dev.Tools: Angular, React, NodeJS, Docker, Jenkins, Github Actions, Heroku Cloud, Heroku Postgres, Postman

Ver.Control: Git, SVN

Projects

Classification of Encrypted Network Traffic - SDN Research Project (CSCI 6709)

P4, Python

USING A DECISION TREE PORTED TO A SOFTWARE DEFINED SWITCH, ENCRYPTED NETWORK TRAFFIC WAS CLASSIFIED INTO 7 MAJOR TYPES USING ONLY 4 RELATED PACKET FEATURES (MAX FIAT, MAX BIAT, MAX FLOWIAT, AND MAX IDLE).

Sports Stats App : Experimental - <https://emilioroche.github.io/sports-stats/>

Express.js, React, Heroku, PostgreSQL, Github Actions

A HOSTED WEB APPLICATION THAT DISPLAYS SPORTS STATS. BACKEND USES HEROKU DATABASE, CALLING POSTGRESQL QUERIES AND TURNS THEM INTO REST API ENDPOINTS HOSTED ON HEROKU CLOUD. FRONTEND CALLS API AND DISPLAYS DATA.

Awards

Dalhousie University

Dean's List, Dean's List, Achieve a GPA of at least 3.70 in the academic year.

2019/2020/2021/2022