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## Education

**Dalhousie University**Halifax, NS, Canada

BACHELORS OF COMPUTER SCIENCE - SPECIALIZATION: COMMUNICATIONS AND CYBER SECURITY

Sep.2017 - May.2022

## 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

# Work Experience \_\_\_\_\_

### **Backend Developer Lead (Volunteer)**

Calgary, AB

Oct. 2022 - Current

**EMPOWERED FUTURES** 

- Manage tasks and workflow in addition to collaborating with the backend team.
- Using Typescript to build RESTful API's with NodeJS and Express.
- Utilize MongoDB for database management, and hosting API's on MongoDB Cloud.

Junior Developer Halifax, NS

SIMPLYCAST

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.
- · Used Phabricator integrated with Git for code review and bug tracking.

Software Developer Halifax, NS

MACDONALD DETTWILER & ASSOCIATES (MDA)

May 2020 - Aug. 2020

- $\bullet \ \ \, \text{Used Typescript/HTML/CSS to implement a sub-section in a management window in the TRITON application.}$
- 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**

Halifax, NS

PUBLIC SERVICE COMMISSION OF THE GOVERNMENT OF CANADA

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

# **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**

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

A HOSTED WEB APPLICATION THAT DISPLAYS SPORTS STATS. ONLINE API TO RETRIEVE DATA, AND INSERT IT INTO HEROKU DATABASE. BACKEND TURNS POSTGRESQL QUERIES INTO REST API ENDPOINTS HOSTED ON HEROKU CLOUD. FRONTEND CALLS API AND DISPLAYS DATA. HTTPS://EMILIOROCHE.GITHUB.IO/SPORTS-STATS/

## 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