# JAMES CHEN

# **Software Engineering**

- @ james.chen5@carleton.ca
- 613-600-9672
- j769chen.github.io
- in james23chen
- **(7)** j769chen

#### **EXPERIENCE**

#### **Data Engineer**

### **Raven Telemetry**

- **April** 2020 August 2020
- Ottawa, Ontario
- Wrote Python scripts to automate monthly and weekly report generation, drastically reducing man hours needed.
- Used Pandas to process data from over 50 customers to generate performance metrics
- Automated report generation process by deploying cronjobs to Kubernetes

# Web Developer

# **Environment and Climate Change Canada**

- September 2019 December 2020
- Toronto, Ontario
- Used the Web Experience Toolkit to develop various web pages for the Canadian Climate Data and Scenarios site
- Wrote scripts using Perl, PHP and JavaScript to create download interfaces for easy access to climate data sets
- Performed regular maintenance including fixing large data sets, using JavaScript to write scripts to efficiently fix errors

#### **PROJECTS**

#### Drively

#### IoT-based smart vehicle control | Arduino, Python, Firebase | Hack the North 2019

- Built a system and implemented an algorithm using Arduino to detect drunk drivers using air quality sensor and fingerprint scanner
- Wrote a Python script to send air quality and driver data to Firebase in real time
- Designed front-end using HTML-CSS-JS which used Firebase to display live driver status

#### **BWF Ranking Viewer**

### BWF World Tour ranking web app | Python, Flask, BeautifulSoup4

- Developed an SSR app using Python and Flask to display badminton world rankings
- Wrote a script which uses BeautifulSoup4 to fetch the top 100 players from BWF website for all categories (singles, doubles, etc.)
- Used Flask to create a back end which processes user's category selection and renders web page accordingly

#### LoL Stats

#### League of Legends Performance Evaluation | Python, Riot Games API

- Developed an app that uses the Riot Games API to evaluate a user's recent LoL stats
- Designed an algorithm that compares a user's stats to those of similarly ranked players
- Implemented search filters, allowing users to choose which games they want evaluated, as well as custom tips to give users tangible advice on how to improve

# j769chen.github.io

# Personal Website | HTML, CSS, JavaScript

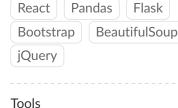
- Used HTML, CSS, Bootstrap and JavaScript to create a modern-looking personal website
- Independently studied front end development via resources such as LinkedIn Learning
- Implemented many features including modal images, carousels and various animations

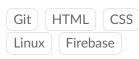
#### **SKILLS**

#### Languages



#### Frameworks & Libraries





#### **EDUCATION**

Bachelor's of Computer Science, Honours Co-op

# Carleton University

- Sept 2020 Present
- Ottawa, On

Current GPA: 12.0

Bachelor's of Mechanical Engineering, Honours Co-op

#### University of Waterloo

- **Sept 2018 Apr 2020**
- Waterloo, On

Ending GPA: 84.74

#### **Awards & Distinctions**

- President's Scholarship
- Class Ranking: 11/94

#### **INTERESTS**

- Badminton
- Fitness/Powerlifting
- Violin