# Norman Anderson

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# **EDUCATION**

# **BSc Computer Science**

Kingston, ON, Canada | Graduated April 2022

QUEEN'S UNIVERSITY

Relevant coursework: Software Design, Computer Networks, Operating Systems, Data Structures, Algorithms

# **WORK EXPERIENCE**

# **AEROSPACE SYSTEMS LABORATORY (ASDL)** | FULL-STACK DEVELOPER Atlanta, GA, USA (remote) | Aug 2023-Present

- Building an interactive campus map so the user can efficiently find and select their desired building on the website.
- Used **Vue.js** framework for the front-end and Python's **flask** for the back end.

# **LAYER 7 INNOVATIONS INC.** | FULL STACK DEVELOPER, CONTRACT Toronto, ON, Canada | July 2023-August 2023

- Spearheading the development of a web app features using **Java Spring Boot** and **React** to manage clients' estate and will. The app was able to generate **\$40,000** in funds
- Optimized the response time of internally-used Java application by 40%.
- Designed and optimized a user registration system for the web app.

#### **INTELLIFI CORPORATION** | SOFTWARE DEVELOPER

Markham, ON, Canada | May 2022 - January 2023

- Back end development of software application used by mortgage lender companies, using **Node.js**.
- Implemented bug fixes and new features in production code.
- Wrote and optimized **SQL queries** for ad hoc and reoccurring client requests to extract data from MySQL servers.
- Reduced data redundancy by 25% in implementation of a new procedure to pledge loans to financial institutions.
- Streamlined business process by developing a feature to automatically update values on loans eliminating tedious manual entries.

# **QUEEN'S UNIVERSITY | TEACHING ASSISTANT (TA)**

Kingston, ON, Canada | Jan 2021 - April 2021

- Taught a second year undergraduate Data Structures course that involved analysis of fundamental data structures such as arrays, stacks/queues, linked lists etc.
- Fostered student learning through holding group and one-on-one office hour sessions.
- Assessed students' programming skills in weekly assignments and provided feedback for improvements.

## **PROJECTS**

# REINFORCEMENT LEARNER STOCK TRADER

PYTHON, NUMPY, PANDAS

- Using Model-free Q-learning RL to produce a trading strategy that beat the benchmark of holding the stock by 30%
- Technical signals such as simple moving averages were used to evaluate the performance of the stock on each day
- Reinforcement learner used the technical indicators signals to build its strategy

#### HOMOMORPHIC GRAPH CRYPTOGRAPHY ☐

PYTHON, MATPLOTLIB

- Encrypting a data graph by adding thousands of nodes and edges. The authentic key holder can process and operate on the encrypted graph without the need for decryption.
- Written in Python with the networkx library for visualization.

### SKILLS

Languages: JavaScript, HTML/CSS, Python, SQL, Java

Other Tools: React, Vue.js, Spring Boot, Node.js, AWS, MySQL, Docker