### Harlan Jazz Ferguson

Toronto, Canada | https://www.harlanferguson.com/

## Objective:

Motivated Computer Programming and Analysis student seeking a full-stack software engineering position. Brings a comprehensive understanding of data structures, algorithms, and a wide range of programming languages. Aiming to leverage strong problem-solving capabilities and experience from software engineering projects and competitive programming.

#### Skills:

- **Programming:** Python, Java, C#, PHP.
- Web Development: HTML, CSS, JavaScript, TypeScript.
- Frameworks: .NET Core, React.js, Django, Swing
- **Python Libraries:** Selenium, Sci-kit-Learn, Pandas, Numpy, tkinter, smtplib.
- Database Management: Oracle SQL Developer, MySQL, SQLite3, MongoDB.
- DevOps: Linux environments, Bash scripting, SSH, WSL, CLI commands, Docker, Azure.
- Other: Scrum, Git/GitHub, Microsoft Office, Raspberry Pi/Arduino development.

### Projects:

- Reddit Title Predictor (Machine Learning): Developed a web application predicting the most suitable subreddit for user-provided titles. Trained a Scikit's Bayes model with a self-generated dataset of Reddit titles, achieving an F1 score of 80%.
- .NET Core Auction Site (Team Project): Contributed to a team project developing a .NET Core site, handling functionalities like account creation, email verification, log-in system, user role management, and bidding system. Deployed to Azure.
- Workorder Management System: Designed a system to manage repair workorders, facilitating workorder creation, search, editing, and deletion through a user-friendly GUI.
- Minimax Algorithm Tic-Tac-Toe: Collaborated in a team to create a Tic-Tac-Toe game using Java, implementing the minimax algorithm for the game bot.
- Personal Portfolio Website: Built a personal portfolio website showcasing various projects.

## Experience:

### Full-Stack Developer | Arcadia | May 2022 - Present

- Collaborates in a team to develop a web application for residential building management, focusing on tenant-staff communications, documentation distribution, and public-facing information.
- Creates web pages that link to our backend to serve information to users, maintaining modern security practices.
- Develops test scripts for new features to ensure smooth deployment.
- Techstack: React.js, Typescript, Python (Django), NGINX, AuthO

# Maintenance Worker | Arcadia Housing Cooperative | June 2021 - Present

- Efficiently manages various repairs including electrical, plumbing, appliance, drywall, painting, and aging in place measures.
- Demonstrates professional communication with tenants and fills in for the maintenance supervisor role when necessary.

## Part-owner | Urbane Cyclist Worker Cooperative | Mar 2012 – Dec 2021

- Reviewed financial statements, identified areas for improvement, and increased profit margin.
- Recorded \$334,246.94 in net sales for 2020 in a seasonal-sales environment while a full-time student.
- Acted as HR representative and head of Health and Safety, providing quality control and constructive feedback to employees.

#### **Education:**

- Advanced Diploma, Computer Programming and Analysis | George Brown College | 2021 present
- Advanced Diploma, Business Administration Retail | George Brown College | 2017 2020

### Certifications & Awards:

- Scrum Fundamentals Certified, 2023.
- Top 27% globally and 15th place in Canada, IEEEXtreme 2022 (Competitive Programming Competition).
- Act in Space International Hackathon 2022, Semi-finalist runner-up for Canada.
- Runner-up, Bell Geekfest 2022 (Hackathon).
- Completed Automate the Boring Stuff with Python Programming, 2020.