Harlan Jazz Ferguson

FULLSTACK SOFTWARE ENGINEER

Toronto, ON | 647-703-9139 | harlanjazz@gmail.com | https://www.harlanferguson.com/

Skills

- **Programming Languages:** Python, Java, C#, PHP.
- **Web Development:** HTML, CSS, JavaScript, TypeScript, Node.js.
- **Frameworks:** React.js, Express.js, Django, .NET Core, React Native, Swing.
- **Database Management:** MongoDB, Oracle SQL Developer, Postgres, MySQL, SQLite3.
- **DevOps:** Docker, Postman, Jenkins, Linux environments, CLI commands and scripting, SSH, WSL, Azure.
- **Python Libraries:** Sci-kit, Pandas, Numpy, Tensorflow, Matplotlib, Tkinter, Smtplib, Flask, Selenium.
- **Other:** Scrum Fundamentals Certified 2023, Git/GitHub, Microsoft Office, Raspberry Pi / Arduino

Projects

- **Phishing Email Detection using AI:** Created a chrome browser extension that read emails, detect suspicious emails with 90% accuracy using a random forest classifier, and if flagged as phishing, generates a warning in the email and disable all external links. **Techstack:** Python (Flask/Sci-kit), JavaScript.
- **Reddit Title Predictor:** Generated a dataset from scratch using Reddit's API and then trained a Bayes model to achieve an 80% F1 score. Built a React frontend for user input. **Techstack:** Python (Django/Sci-kit/Pandas), Typescript, React.js
- **Peer-to-Peer bidding website:** Programmed alongside teammates to produce a functional web application that allows for user signup/sign in, 2FA, admin user accounts, item creation, and a bidding mechanism. We deployed our solution to Azure. **Techstack:** C#, .NET, Azure.
- **Minimax Algorithm implementation:** Worked on a team to develop a desktop application that uses minimax in a game of tic-tac-toe with a win rate of 100%. **Techstack:** Java (Swing)

Achievements

- Top 18% in IEEEXtreme 2023 international programming competition with over 20,000 participants.
- Top 27% in IEEEXtreme 2022 international programming competition with over 14,500 participants.
- Competed in Bell GeekFest 2023 / 2022 and ActInSpace International Hackathon 2022.

Education

George Brown College, Advanced Diploma: Computer Programming and Analysis	**2021-2024**

- GPA: 3.30 | Dean's Honour Roll
- Co-founder and VP of GBC Computer Science Club
- A- in Data Structures and Algorithms

George Brown College, Advanced Diploma: Business Administration – Retail	**2017-2020**

- GPA: 3.32 | Dean's Honour Roll

Work Experience

**Arcadia Housing Coop	Maintenance Worker and IT Consultant**	**2021 - Present**
**Urbane Cyclist	Co-Owner and Mechanic**	**2012 - 2021**