ROHAN MINOCHA

TECHNICAL SKILLS

Languages | Python, C/C++, SQL, HTML/CSS, R, Golang, Swift, JavaScript, Java **Libraries** | pandas, NumPy, Matplotlib, scikit-learn, rgdax, mailR, stringi **Frameworks** | Django, Flask, Bootstrap

PROJECTS

Credit Card Fraud Detection System 🔾

- Built a data investigation model using Python, pandas, Matplotlib, and NumPy that identifies fraudulent transactions.
- Implemented Machine Learning using the k-nearest neighbors algorithm and k-means clustering.
- Trained the model on data from over 280K credit card transactions that detected all 492 are fraudulent in 5.2 seconds.

Cryptocurrency Trading Bot 🗘

- Developed a bot using **R** language and several of its libraries to trade the Ethereum CAD pair on the GDAX exchange through the API.
- Implemented a combination of Relative Strength Index (RSI) indicators suggest to a momentarily oversold market.
- Executed the bot to loop when account balance is more than \$20, buy as much ETH from the current account balance, and sends an email alert notifying about the buy action.

Xpiry Trackr Application | yuHacks 2021 **(7)**

- Designed a full-stack application using **JavaScript** and **React Native** that keeps track of products' expiry and sends reminders a week in advance.
- Created a bar code scanner that identifies the scanned product and proceeds to scan the expiry date.
- Implemented an algorithm to make the bar code scanner automatically cycle through the user flow, with manual buttons allowing for cases where products cannot be scanned properly.

EXPERIENCE

Software Developer

Sept 2021 - Dec 2021

Elekta

Toronto, ON

- Improved the stability of machine QA software (AQUA) using VMWare and Java by developing test plans.
- Developed a standardized tool for software license generation which is over 1.6K times more efficient.
- Designed the AQUA v3.1 demo with **Azure** instances used in sales and conference presentations that helped acquire **30 new clients**.
- Proposed a solution strategy that addressed over **20** cybersecurity vulnerabilities and adhered to OWSAP recommendations.

Mathematics & Computer Science Tutor

Mar 2020 - Feb 2021

Self-employed

Kuwait

- Mentored 4 high school students (Grade 11) to increase a letter grade of C to A in Mathematics, as well as helped 2 students (Grade 12) to achieve an average of 95%+ Computer Science.
- Designed detailed lesson plans, and remained flexible by delivering lessons over an online platforms (Zoom & Google Meet). Integrated technology in a seamless manner to provide students with an optimal way of learning.

VOLUNTEERING

Mentor | Hack the North 2021, Hack the Valley 2021, HackHarvard 2021

Sept - Oct 2021

Assistant Teacher | Dr. Ruhi Foundation School

Jun - Jul 2019

EDUCATION

University of Waterloo

Sept 2020 - Apr 2025

Waterloo, ON

Candidate for Bachelor of Computer Science

- President's Scholarship of Distinction
- Relevant Coursework: Object-Oriented Software Development