

ROHAN MINOCHA

Software Engineer

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TECHNICAL SKILLS

Languages | Python, C/C++, SQL, HTML/CSS/SCSS, R, JavaScript, Java

Libraries | pandas, NumPy, Matplotlib, ReactJS, scikit-learn, rgdax, mailR, stringi

Technologies | VMware, Django, Flask, React Native, Git, Azure, Bootstrap

EXPERIENCE

Software Developer Intern

Sept 2021 – Dec 2021

Elekta Toronto, ON

- Improved stability of machine QA software across multiple browsers using VMware and Java by developing test plans
- Optimized software license generation by over **15x** by creating a standardized tool, which cut costs by **5%**
- Designed AQUA v3.1 demo with Azure instances used in sales and conferences that helped acquire **30 new clients**
- Resolved faulty rounding function with Java that reduced inaccuracies by **25%** in physics tests for linear accelerators
- Analyzed cyber security vulnerability reports and proposed solution plans adhering to Open Web Application Security Project (OWASP) recommendations that addressed over **20 vulnerabilities**

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 and assisted 2 students (Grade 12) to achieve an average of **95%+** Computer Science
- Designed detailed lesson plans, and remained flexible by delivering lessons over online platforms (Zoom & Google Meet)

PROJECTS

Credit Card Fraud Detection System 📄

- Built a data investigation model using **Python**, **pandas**, **Matplotlib**, and **NumPy** that identifies fraudulent transactions
- Trained the model on data from over **280K** credit card transactions that detected all 492 frauds within **26 seconds**
- Implemented Machine Learning using the k-nearest neighbors algorithm and k-means clustering with a **99% accuracy**
- Utilized data cleaning, data visualization, and confusion matrix methods to detect fraudulent transactions

Cryptocurrency Trading Bot 📄

- Developed a bot using **R 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
- Designed an algorithm to automatically buy ETH based on predefined rules and currently available balance, and notified users of buy action using email

Xpiry Trackr Application | yuHacks 2021 📄

- 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

VOLUNTEERING

Mentor | Hack the North '21, Hack the Valley '21, HackHarvard '21

Sept 2021 – Oct 2021

Assistant Teacher | Dr. Ruhi Foundation School

Jun 2019 – Aug 2019

EDUCATION

University of Waterloo

Sept 2020 – Apr 2025

Bachelor of Computer Science

Waterloo, ON

- President's Scholarship of Distinction