

Sahal Sajeer Kalandan

University of Waterloo BMath Student

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EXPERIENCE

FEELY CORP | FULLSTACK DEVELOPER

Sept 2022 – Dec 2022 | Waterloo, Ontario

- Helped deploy a web application to enable distribution of local services using a stack of **NodeJS**, **Angular**, **TypeScript**, HTML/CSS and **PostgreSQL**
- Designed custom login with **Facebook API** on TypeScript to help users register, login and change password. Styles were imported from templates designed on **Figma**
- Implemented **Azure AD B2C** support to help securely store user information on Microsoft servers

PERASO TECHNOLOGIES | AUTOMATION SOFTWARE DEVELOPER

Sept 2021 – Dec 2021 | Waterloo, Ontario

- Researched a **NodeJS** solution to refactor **C++** testing APIs, allowing for asynchronous testing which increased **host utilization** on tests by 4 times
- Created and improved reliability of drivers for **50+** 5G dongles and hosts, written using **Native Extensions** and **QT Engine 5**
- Identified **100+** vulnerabilities in different host frameworks and builds of 5G dongles using **WAF scripts**

IAAF WORLD CHAMPIONSHIPS | SALES ASSOCIATE (VOLUNTEER)

Sept 2019 – Oct 2019 | Doha, Qatar

- Sold and processed over **11,800** tickets using Excel to managing financial data for the competition
- Led a team of **10** to manage a ticket stall during events

PROJECTS

CREDIT CARD FRAUD DETECTION 2023

- Trained a ML model using the **K-nearest neighbors** approach on **Python** using **scikit-learn** to be able to determine if a credit card transaction was fraudulent from a dataset provided by Scotiabank during a competition
- Utilized **89,230** different credit card transactions each with **175** features to train the model. Implemented different **encoding methods** and **PCA** to improve model accuracy and reduce overall noise
- Retained a macro average F1-score of **80** percent. Placed in top **20** teams.

KINDKART 2021

- Chrome extension built using **HTML**, **CSS**, **JavaScript**, and **Google Firebase**
- Provided users with ethics reports on major online retail and exclusive coupon donations

ENCOURAGE BOT 2021

- Discord Bot developed in **JavaScript** using **Discord.js** framework and **MySQL**
- Recognizes negative words from users and outputs encouraging statements using **ZenQuotes API**

ABOUT ME

3rd year Waterloo Math student with a specialization in **statistics**. Enjoys working with **data**, making **music** and **skateboarding**. Dislikes TikTok.

SKILLS

PROGRAMMING

Java • HTML/CSS • JavaScript • TypeScript • Python • C • C++ • JavaScript • R • SQL • PostgreSQL

LIBRARIES/Frameworks

jQuery • Node.js • Jekyll • React • Angular

TOOLS/PLATFORMS

Git • Gulp • Perforce • Jira • Docker • Linux/Unix

EDUCATION

UNIVERSITY OF WATERLOO

BACHELOR'S IN HONOURS

MATHEMATICS

Sept 2020 - Present | Waterloo, Ontario

Faculty of Mathematics

Relevant Courses:

Linear Algebra, Calculus 3, Applied Linear Models, Introduction to Combinatorics, Computational Statistics and Data Analysis (**in R**)

AMERICAN SCHOOL OF DOHA

Aug 2008 - May 2020 | Doha, Qatar

Full AP Capstone Student

REFERENCES

Available upon request