

Marzookh Farook

825-343-1902 | farook.marzookh@gmail.com | [linkedin.com/in/marzookh](https://www.linkedin.com/in/marzookh) | github.com/marzookh

EDUCATION

University of Alberta

Edmonton, Canada

Bachelor of Science in Computer Science, Minor in Software Practice

Sep. 2019 – May 2024

Courses – Software Engineering, File & Database Management, Data Structures & Algorithms, Theory of Computation, Reinforcement Learning, Machine Learning, Information retrieval

EXPERIENCE

Tesla

Aug 2023 – Jan 2024

Vehicle Software Intern

California, USA

- Part of the Applications Engineering team managing WARP, Tesla's proprietary ERP software
- Engineered an internal tool using **Python** and **Django** that uses text classification to fetch, analyze and visualize test results, leading to significant improvements in user experience and increased reliability by 30%
- Developed a **CI/CD** test suite in **Selenium** consisting 150 + unit/integration tests covering 80% of new features
- Achieved a 91% bug-free project during a critical testing phase of a new feature which was recognized by project manager

Citi

May 2023 – Aug 2023

Software Development Intern

Toronto, Canada

- Part of the FX UI team, worked on the FX Velocity trading application in **Angular**, **Node.js** and **JavaScript**
- Redesigned components utilizing **Angular material** and **CSS** to enhance user experience and optimize functionality
- Enhanced scripts using JavaScript to automatically triage, manage and classify bugs, resulting in effective prioritization and improved quality of life
- Writing and automating tests in **Mocha**, ensuring adherence to specified standards and end-user requirements

Illumio

May 2022 – Aug 2022

Engineering Intern - QA Data team

California, USA

- Migrated **JUnit** tests from a Java framework in **Selenium** to a JavaScript framework in **Cypress** saving 10+ hours weekly
- Automated unit tests for Illumio's PCE Core product prior being pushed to our CI/CD pipeline on **Jenkins** into production
- Integrated low-latency technologies into the existing application to track resource utilization and performance metrics, achieving optimal efficiency
- Streamlined team collaboration by creating product backlog and requirements doc to prioritize features and find blockers

LINCS

Sep 2021 – April 2022

Junior Research Analyst

Edmonton, Canada

- Developed an NLP tool using **SQL** in **Python** and **AWS** to assist with the conversion of large datasets to linked open data
- Deployed tool using REST API on Compute Canada's Servers using **Kubernetes**. Check out this [article](#) on the tool!
- Managed Testing and validating the performance of data processing and conversion tools

Future Creators Club

Sep 2020 – April 2021

Team Lead

Edmonton, Canada

- Future Creators is a non-profit organization that inspires future engineers and technology innovators
- My team and I worked with high school students in grades 8-12 and helped them build exciting coding projects

PROJECTS

NLP Text Classification | *Python, IntelliJ*

Jan 2023

- Implemented query analysis and text relevance matching using machine learning algorithms such as Naive Bayes, Rocchio, and kNN classification
- Designed a ranking system to display results by calculating classifier statistics based on confusion matrices
- Developed Rocchio with efficient sparse vector encoding, while kNN employed normalized document vectors for classification.

Social Distribution | *Python, Django, React, PostgreSQL, Docker*

Sep 2022

- Developed a Facebook-like decentralized social networking application using Django and React with Material-UI as the frontend
- Visualized GitHub commit data to show the latest activity for a user based on their profile using Github API
- Implemented P2P node connections to exchange data such as posts, comments, likes and friend requests

PhenoCount | *Java, JavaScript, Kotlin, IntelliJ*

Sep 2021

- PhenoCount is an easy-to-use Android mobile application that allows for crowd-sourced testing of phenomena
- Firebase Firestore used for real-time data integration, Google map API for location services
- Utilized Next.js to implement server-side rendering along with React hooks, resulting in a 30% improvement in load times

TECHNICAL SKILLS

Languages: Python, C/C++, Java, SQL (Postgres), JavaScript, HTML/CSS, R

Frameworks: React, Node.js, Django, JUnit, MongoDB, Firebase, Material-UI, FastAPI,

Developer Tools: Git, Docker, Jenkins, CI/CD, Linux, VS Code, PyCharm, IntelliJ