Muhammad Rabee

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EDUCATION

University of Waterloo | *Bachelor of Computer Science, Minor in Statistics* Sep 2020 – Apr 2025
- **GPA**: 3.92/4.00 (Dean's List)
- **Relevant Coursework:** Intro to Compilers, Data Structures, Database Management, Object-Oriented Software Development, Computational Statistics & Data Analysis, Combinatorics & Graph Theory

SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL, C, C++, HTML/CSS, R
Frameworks/Libraries: Pandas, React, Node.js, Express, Matplotlib, Scikit-learn, Seaborn
Tools: Docker, Git, Linux, Bash/zsh, Tableau, Jira, Amazon Web Services (AWS)

EXPERIENCE

Amazon | *Software Development Engineer Intern* May 2023 – Aug 2023
- Implemented a full-stack application using **Java** and **TypeScript** that detected discrepancies for Amazon's recruiting engine tool, decreasing on-call ticket resolution time by **30%**.
- Engineered a CI/CD pipeline with automated integration testing to deploy the application to production servers, decreasing manual bug bash time by **25%**.
- Authored a technical design document outlining functional and non-functional specifications, including API sequence diagrams, software architecture decisions, and test plans.

Scotiabank Global Banking & Markets | *Data Scientist/Engineer Intern* May 2022 – Aug 2022
- Developed an email framework built in **Python** that automatically delivered emails conveying early warning signals of client credit deterioration to **100+ investment bankers** based on portfolio changes.
- Built and maintained an ETL data pipeline with **AirFlow**, feeding real-time financial data to Tableau dashboards used by bankers to manage client risk by **20%**.
- Conducted exploratory data analysis using a Financial Markets database (Refinitiv), visualizing data with **Pandas** and **Seaborn** to present valuable insights to Directors.

Scotiabank | *Data Analyst Intern* Jan 2022 – Apr 2022
- Deployed **5 PowerBI** dashboards into production, providing views on ongoing projects, milestone status updates, and compliance regulations at the bank.
- Performed ad-hoc **SQL** queries, retrieving valuable data for other ongoing projects on the team, reducing downtime between projects by **15%**.
- Reduced overdue milestones by automating reporting of pending approvals with **Python** and liaising with PMs, generating over an **88%** reduction in non-compliant milestones.

PROJECTS

Biquadris (2-player Tetris) | *C++, Bash, Object-oriented programming*
- Created a modified version of Tetris using object-oriented programming principles that supported two-player capability, and special abilities with graphic support in **C++**.

Powerlifting App | *JavaScript, React, Node.js, MySQL, Express, Docker* ⌂
- Developed a full-stack powerlifting application that allowed users to track lifts and meet performances with a **MySQL** database, **React** frontend, and **Node.js** backend.

WLP4 Compiler | *C++, MIPS Assembly*
- Engineered a compiler that translates WLP4 a subset of **C++** to **MIPS assembly** ensuring compliance with semantic and syntactic rules through scanning, parsing, context-sensitive analysis, and code generation.

Personal Website | *HTML, CSS, JavaScript, Netlify* ⌂
- Designed a responsive web page using **HTML, CSS, JavaScript** and hosted via Netlify to showcase projects, and previous internship experience.

COURSES & CERTIFICATIONS

- **Coursera:** Neural Networks & Deep Learning, Machine Learning (Stanford), Structuring Machine Learning Projects, Improving Deep Neural Networks

- **Certifications**: Amazon Web Services (AWS) Certified Cloud Practioner