Aagam Shah

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EDUCATION

University of Waterloo

Waterloo, ON

 $Bachelor\ of\ Computer\ Science$

Expected Graduation: May 2026

Cumulative GPA: 3.90

Relevant Coursework: Object Oriented Programming, Data Structures and Algorithms, Application Development

EXPERIENCE

Software Developer Intern

Jan 2025 - Present

Geotab

Toronto, ON

Software Developer Intern

May 2024 - Aug 2024

Moody's

Toronto. ON

- Reduced runtime of reserve component calculations by 7% by integrating SQL queries into a newly engineered relational database to automate the generation of several Enum lists
- Refactored the reserve component storage code into a separate class which reduced 1200 lines overall and decreased compile time by 12%
- Incorporated **error walk-through** messages into Moody's proprietary AXIS feature codes allowing users to be guided in real-time error resolution

Business Development Intern

May 2023 - Sept 2023

Safeline Group of Companies

Concord, ON

- Developed a **Python** script with automation capabilities to analyze and compare **over 1 million words** across several legislations, pinpointing critical variances to update
- Engineered an automated database using **VBA**, cataloging all company files on hand and auto updating new files through a user friendly **interface**
- Designed an integrated internal company website using **Microsoft SharePoint**, centralizing all essential resources within a unified digital domain for **enhanced accessibility** and productivity

Data Analyst Intern

Sept 2020 - Jan 2021

CYR Funding

Markham, ON

- \bullet Independently automated a manual customer database using VBA which reduced data entry time by 45%
- Used smtplib and pandas in Python to iterate over client emails in the customer database which increased sales by 15% across the term

TECHNICAL SKILLS

Languages: Python, C/C++, C#, Java, JavaScript, R, SQL

Libaries/Frameworks: Node.js, React.js, Pandas, Numpy, Matplotlib, Jupyter Notebooks

Tools/Technologies: Linux, Git, GitHub, VSCode, Visual Studio, PowerBI, Bash, AWS, Power Automate

Extra-Curriculars

Firmware Developer

January 2024 – April 2024

Electrium Mobility

Waterloo, ON

- Employed STM32 Cube IDE to generate output through a Serial Audio Interface (SAI) using the HAL_SAI_Receive components through a polling mechanism
- Played an integral role in **Agile development** methodologies, participating in daily stand-ups, sprint planning, and retrospectives to enhance team collaboration and project efficiency

PROJECTS

LiftOff | Kotlin, PostGres, Supabase, Android Studio

Dec 2024

- Built a modular and maintainable codebase using MVVM architecture, incorporating ViewModel for lifecycle management, LiveData for real-time UI updates, and Repository for streamlined data handling
- Implemented a cloud-hosted backend with Supabase, leveraging Postgres for efficient and scalable database management

Minesweeper | Python, PyGame

Dec 2023

- Utilized Pygame library in Python to generate the graphics for the minesweeper game and structure the gameboard to a fixed size of **700 by 800 pixels**
- Generated a random algorithm to the game to determine the number of bombs and its location on the game board to provide a realistic user experience
- Multidimensional arrays were elegantly captured through the utilization of a single array, where the precise positioning of each element was intelligently calculated based on the width of the board