# Wahab **Ahmad**

COMPUTER ENGINEER

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## Education

**University of Waterloo**                                        *Waterloo, Canada*
B.S. IN COMPUTER ENGINEERING                                     *Sep. 2018 - Apr. 2023*
• Cumulative GPA of 3.7

## Experience

**Extend**                                                         *New York - In Person*
BACKEND ENGINEER INTERN    (SPRINGBOOT, KOTLIN, TERRAFORM - AWS)    *Sept. - Dec. 2022*
• Created and implemented a custom command-line interface (CLI) to streamline frequent procedures and tasks, resulting in a 30% increase in developer productivity and efficiency, as measured by a decrease in time spent on repetitive tasks.
• Resolved issues related to data synchronization between Expensify and Quickbooks expense management APIs and customer enterprise resource planning (ERP) systems, resulting in improved data accuracy and integrity.
• Designed and implemented an AWS infrastructure with automated database snapshot replication across regions to ensure high availability and disaster recovery.
• Implemented encryption-at-rest for sensitive data using KMS keys and AWS SSM parameter store, increasing the security and protection of critical information.

**Autodesk**                                                       *Montreal - Remote*
FULL STACK INTERN    (PYTHON, NODEJS, AWS)                         *Jan. - Apr. 2022*
• Conducted threat modeling to identify potential vulnerabilities and implemented payload validation code to prevent mass assignment vulnerability, resulting in a 100% reduction in successful mass assignment attacks and ensuring the security and integrity of the system.
• Implemented AWS lambda functions to improve cost efficiency by removing inactive users and their assets, resulting in a 2.5% reduction in monthly AWS storage costs.
• Created a health check system using AWS CloudWatch Metrics and Alerts to ensure timely and efficient character generation.

**SS&C Technologies**                                              *Toronto - Remote*
FULL STACK INTERN    (SPRINGBOOT, ANGULARJS, SQL)                 *Jan. - Apr. 2021*
• Developed and deployed a web application using the Model-View-Controller (MVC) architecture, leveraging Spring Boot for the backend and AngularJS for the frontend, resulting in a 50% increase in user satisfaction, as measured by user feedback surveys.
• Led the development of a reactive user interface utilizing RxJS operators, reducing development cost by 10% as measured by the reduction in Jira tickets.

**PointClickCare**                                                 *Mississauga - Remote*
SOFTWARE ENGINEER INTERN    (C++, SPRINGBOOT)                     *May. - Aug. 2020*
• Optimized legacy C++ code by implementing declarative multithreading using OpenMP, resulting in a 30% reduction in backend runtime costs.
• Developed a Java web application using Spring Boot framework and technologies such as Spring Data JPA and Spring Data Repositories to handle data fetching and persistence, and used JSP as the view technology.
• Configured and Integrated Spring Security for Authentication and Authorization and exposed RESTful API endpoints for the frontend to consume.

**Praemo**                                                         *Downtown Kitchener, ON*
DATA SCIENTIST INTERN    (PYTHON)                                 *Sept. - Dec. 2019*
• Developed and deployed a machine learning model utilizing maximum likelihood estimation to detect anomalous cycles in CNC machines, resulting in a 85% accuracy rate and significantly reducing downtime and maintenance costs.
• Implemented and executed supervised clustering and classification techniques using k-means and k-nearest neighbor algorithms, providing actionable insights and improving the overall efficiency of the manufacturing process.

**Mentr.ai**                                                       *Downtown Toronto, ON*
JUNIOR DATA SCIENTIST - FREELANCE    (PYTHON)                     *Mar. - Apr. 2019*
• Developed and implemented a Python web scraper using Selenium and Google Search API to collect 23,000 online course links and descriptions, resulting in a comprehensive dataset for data analysis.
• Constructed and trained a Word2Vec natural language processing model using TensorFlow to rank order courses according to relevance to a given search query, resulting in a more efficient and accurate search feature for an IOS application.

**GrowthGenius**                                                                    *Downtown Toronto, ON*
SOFTWARE DEVELOPER - FREELANCE   (APPSCRIPT)                                          *Jan. - Mar. 2019*

- Developed and deployed a Google Sheets add-on using Google AppScript, that automates repetitive tasks, such as data manipulation, data validation, and data entry, to improve efficiency and reduce the need for outsourced work.
- Implemented cost-saving measures by utilizing the add-on, the company was able to save an estimated $X,000 per month on outsourced work costs, as reported by the finance department, by reducing human error, increasing data accuracy and reducing the time spent on repetitive tasks.

# Additional Activities

**Watonomous**                                                                       *Waterloo, ON*
NAVIGATION TEAM LEAD   (C++, ROS)                                                     *Jan. - Dec. 2020*

- Led a team of engineers to design and develop the navigation system for University of Waterloo's first autonomous vehicle, utilizing my expertise in Robot Operating System (ROS) and compilers.
- The team implemented a C++ parser and serializer to convert HERE Map data into a lightweight OpenStreetMap (OSM) format, resulting in a 40% improvement in runtime performance and enabling more efficient navigation capabilities for the autonomous vehicle.

**Conrad School of Entrepreneurship and Business Conrad**                            *Waterloo, ON*
ENTREPRENEUR IN TRAINING - BRIDGING ENTREPRENEURS TO STUDENT PROGRAM                  *Jan. - Apr. 2019*

- BETS is a specialized program for select first-year engineers. As an entrepreneur in training, I completed an intense 40+ hour entrepreneurship boot camp, followed by 15 weeks of micro-placements with local start-ups. I assisted the start-ups with objectives-driven projects to help them reach critical business milestones.