

# AAYUSH SONI

☎ 647-561-4148 ✉ [aayush.soni@uwaterloo.ca](mailto:aayush.soni@uwaterloo.ca) 🌐 [aayush-soni](#) 📄 [aayush3416](#) 🔗 [aayush3416](#)

## Technical Skills

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**Languages:** Python, Golang, C/C++, HTML/CSS, JavaScript, Typescript

**Frameworks:** ReactJS, Angular, Node.js, Flask, Django,

**Tools:** PostgreSQL, MongoDB, Dgraph, Git/GitHub Jenkins, Docker

## Work Experience

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### Software Developer – Accipiter Radar Technologies

Jan 2022 – April 2022

*Technologies: Python, Golang, TypeScript, Angular, Docker, Jenkins, JavaScript*

*Niagara, Ontario*

- Created a backend HTTP server in Golang to POST 10K+ requests daily, fetched data from Dgraph using DQL and connected Angular's HTTP client to display data
- Performed **test-driven development** by writing unit tests for existing APIs using Python unittest with Selenium, increasing code coverage by 27%
- Utilized Jenkins to provide a **continuous integration** service in order to automate the entire process of loading the latest build code and test files, running the tests, and generating a report of the results once per day.
- Worked in an **Agile environment** to decrease app failures by 65% by fixing over 40 bugs, improving API request times by up to 90%

## Relevant Experience

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### Backend Software Developer – Waterloo Rocketry Team

Jan 2022 – Present

*Technologies: Node.js, Express, AWS, Slack, Mocha Chai*

*Waterloo, Ontario*

- Worked on a Slackbot to handle team meetings, commands, and reminders using **Node.js**, **Express**, and **AWS**
- Designed our Slackbot to use **AWS Lambda Functions** to listen to **HTTP requests** made by Slack and other APIs to create custom responses, and utilized **GitHub Actions** for automatic deployment to AWS
- Created new and modified existing integration tests with **Mocha** and **Chai** to ensure correctly functioning code

## Projects

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### Expense Tracker | Node.js, Express, Postman, MongoDB, React

- Created **CRUD** an app to keep track of expenses by calculating the difference between entered income and expenses
- Utilized **MongoDB** to keep track expenses and tested API Endpoints through **Postman** by sending POST requests
- Designed UI using React/JavaScript, implemented **React Hooks** to make code 37% more efficient and used **Express API** to connect backend and monitor the transactions made by a user

### Tic Tac Toe | C, Ev3 Robot

- Built a physical Robot using the **EV3 Mindstorm & Lego** to have the Robot play Tic Tac Toe against a player
- Implemented **object-oriented programming** practices to create a **minimax** algorithm to ensure the player never wins
- Created a rotate function to make Robots 90° turn smooth to increase **accuracy by 58%** and reduce errors by 76%
- Managed and led a team of 6 by working in a Agile Environment and portraying strong **collaboration skills**

### Personal Blog | Python, Flask, Bootstrap, PostgreSQL, Heroku

- Developed a **CRUD** application using **REST API** to allow users to gain insight on technological advancements
- Created back-end with **Flask** and used **POST** requests to send information from the login form to the **server**
- Implemented **OOP** practices such as **inheritance** to create the login, register, and comment form on the blog
- Utilized the **PostgreSQL database** to store user information, blog posts, comments and hosted blog on Heroku
- Designed a user-friendly interface using **HTML5/CSS** and **JavaScript** to ensure simplicity and positive user experience

## Education

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### University Of Waterloo

Sept. 2021 – April 2026

*Candidate of Bachelor of Applied Science in Mechatronics Engineering*

*Waterloo, ON*

- **Relevant Courses:** Digital Computation(C/C++), Data Structures and Algorithms
- **Cumulative GPA:** 3.90/4

## Interests

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Garba(Gujarati traditional dance), Tabla Player(Indian classical instrument), Hockey, Crypto, Programming