

PARTH PATEL

(647)-571-2914 | parth.patel@uwaterloo.ca | [parth-29](https://www.linkedin.com/in/parth-29) | [parth-p29](https://www.github.com/parth-p29) | parthpatel.site

SKILLS

Languages: Python, JavaScript, C++, C#, PHP, SQL, HTML/CSS

Frameworks/Libraries: Flask, Node.js, Express, Pandas, React

Development Tools: Postman, MongoDB, AWS, Firebase, Bash, Jira, Git, Docker

EXPERIENCE

Backend Software Engineer Intern — Reebee, Inc

Sep 2021 - Dec 2021

Technologies: PHP, MySQL, Postman, AWS, Snowflake, Jira

Kitchener, ON

- Reduced flyer creation times by up to **1.5 hours** through developing an item sharing API endpoint that automatically filters and transfers all retailer-requested items from existing flyers to their desired ones, using **PHP** and **MySQL**
- Prevented **over \$1,000/day** in losses by creating a fail-over environment in **AWS EC2** to leverage traffic during outages
- Mitigated **100+ errors** and reduced memory usage by **18%** through refactoring the codebase with **PHPStan**
- Automated the user engagement system to filter, group, and pass daily emails to **Zendesk** for easy management

Software Developer Intern — Ceridian

Jan 2021 - Apr 2021

Technologies: C#, Azure, MongoDB, Postman, SQL, Docker

Toronto, ON

- Streamlined the data retrieval process for **350+ engineers** by building a centralized configurations micro-service using **C#** and **MongoDB**, ensuring that every team's data can be grouped and securely retrieved in one place
- Reduced app failures by implementing an **exponential backoff algorithm** within API calls to retry failed requests and improve the overall reliability of the application
- Developed **authentication middle-ware** to secure sensitive API endpoints within various internal tools using **C#/JWT**
- Increased code coverage from **53% to over 90%** with unit testing in **Xunit** to monitor service up time

Full Stack Developer — Waterloo (Student Design Team)

Sep 2021 - Dec 2021

Technologies: Node.js, Express, PostgreSQL, Mocha, Chai, React

Waterloo, ON

- Built the backend for a new recruitment service, replacing Google Forms, using **Node.js**, **Express**, and **PostgreSQL**
- Developed API endpoints with **Node.js** and **Express** that introduces blog posts within the team's web interface
- Created new and modified existing integration tests with **Mocha** and **Chai** to ensure correctly functioning code

PROJECTS

Diversify (Spotify Analytics Web App) [↗](#) | Python (Flask, Pandas), Azure, Spotify Web API, Chart.js, Heroku, HTML/CSS

- Developed a web app that visualizes **600+ users'** Spotify data and recommends new songs based on their interests
- Designed a **Python/Flask** backend which handled **over 58,000 requests** to multiple endpoints for processing user data
- Parsed song features with **Pandas** and analyzed its sentiment using **Azure Cognitive Services** to recommend new music

Companion (nwHacks 2021 Project) [↗](#) | Node.js, Express, Socket.io, Firebase

- Received Honorable Mentions out of **700+ participants** for building a mental health chatroom at a 24-hour hackathon
- Configured a chat with **Socket.io** that ensures healthy conversations through an **AFINN-based sentiment analysis** model
- Integrated **Firebase** to perform authentication via Google OAuth and to store real-time user metrics collected on the app

YearView (Nostalgic Photo Storage App) [↗](#) | Python (Flask), MongoDB, JavaScript, HTML/CSS

- Constructed a **Flask** backend connected to a serverless **MongoDB** instance allowing fast image upload and delete
- Built **RESTful API** endpoints for encrypting user login details and image keys, enabling safe photo manipulation

EDUCATION

University of Waterloo

Sep 2020 - Apr 2025

Bachelor of Applied Science — Systems Design Engineering

Waterloo, ON

- Cumulative GPA: 3.93/4.00
- Relevant Courses: Data Structures and Algorithms, Digital Computation (C/C++), Digital Systems (Circuits/Assembly), Human Factors in Design

INTERESTS

Garba (Indian Dance), Hackathons, Basketball, Astronomy, Calisthenics