# Miles Zaman

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#### TECHNICAL SKILLS

Languages: JavaScript, Java, TypeScript, Python, C, C++, C#, SQL

Technologies: Pandas, TensorFlow, MongoDB, Express, React, Angular, Node, Spring Boot, ASP.NET Core

#### EDUCATION

## University of Waterloo

Waterloo, CA

Bachelors of Computer Science, Minor in Statistics

2021 - Present

# EXPERIENCE

## **ATS** Corporation

Jan. 2023 – Apr. 2023

Software Developer Intern

Cambridge, ON (Remote)

- Developed illuminate 🗹, which has 350+ business users, using .NET with C#, Angular with JavaScript and MSSQL
- $\bullet \ \ {\rm Optimized\ database\ calls\ by\ decomposing\ MSSQL\ queries\ resulting\ in\ a\ 16\%\ decrease\ in\ display\ table\ load\ time}$
- Cleaned up code and implemented best practices resulting in a 38% decrease in code smell issues on SonarQube
- Fixed installer bugs related to security and permissions issues, resulting in a 12% reduction in vulnerability alerts
- $\bullet$  Rectified a time conversion bug in the **REST API** controller, yielding a 14% reduction in testing scripts errors

Achievers Inc May 2022 – Aug. 2022

Software Developer Intern

Toronto, ON (Remote)

- Developed a **React** component library with 35+ standardized components to ease the web development process
- ullet Removed external dependencies (ex. Material-UI) by rewriting components which decreased load time by 8%
- Established data fetching control and reduced API calls by 23% by transitioning from REST APIs to Graphql
- Manually configured **Storybook** with **Webpack5** by modifying internals to migrate away from Gatsby for PM team
- Achieved the WCAG 2.1 Accessibility standards by adding ARIA labels with proper tab indexing to components

**SPARK** July 2021 – Apr. 2022

Software Developer

Fremont, CA (Remote)

- Developed a multiple choice quiz app used in 800+ student quizzes, utilizing ASP.NET Core and MSSQL
- Implemented authentication on the quiz platform and set up automated confirmation emails for scores, sign-up, etc.
- $\bullet$  Reduced load time by 17% by utilizing CDNs, minifying code, removing unnecessary items and plugins
- Concurrently developed a front-end educational platform using **React** and **Bootstrap** to educate 500+ children
- Standardized the design language with a mobile-first approach which improved mobile user satisfaction by 29%

CrowdDoing May 2020 – Aug. 2020

Data Scientist Intern

San Francisco, CA (Remote)

- Collected data for 65+ herbs by scraping multiple sources through Python with Scrapy and Beautiful Soup
- Processed and cleaned 35+ data sources into a singular, coherent dataset using Pandas and NumPy
- Leveraged indexing and partitioning in PostgreSQL to improve query performance by 31% on average
- Wrote a recommendation system for herbs and medicinal foods using TF ranking in **TensorFlow** with ScaNN
- Applied cluster analysis techniques such as **K-means** to classify 100+ items into their nutrient categories

#### PROJECTS

Forex 🗷 | MongoDB, Express, React, Node, Firebase, Tailwind CSS, JWT

- Used a MongoDB database to store login credentials with an Express.js server to handle user authentication
- Utilized Fixer.io's API to display exchange rates for 170+ currencies as recommendations on the dashboard
- Incorporated JWT signature verification to maintain authorized user's access to the Firebase-powered chat and API
- React-based front-end is focused heavily on UX/UI by using frameworks like Tailwind CSS and PostCSS

# Citadel Data Open 🗹 | Python, Plotly, Seaborn, Pandas

- Co-authored a report which examined how investments in businesses and education affect traffic in major cities
- Cleaned, organized, and structured, multiple provided and researched data sets, with 1 Million+ entries
- Applied analysis techniques to derive statistically significant findings on traffic congestion patterns
- Created graphs using the Python libraries Plotly and Seaborn, while utilizing Pandas to organize the data

#### OpenCare 🗹 | Spring Boot, XAMPP, Maven, MySQL, REST API, React, Vite

- Implemented a real-time Q&A using STOMP over a WebSocket protocol with SockJS on the client-side
- Built a back-end API using **Spring Boot** with **Java** and **Maven** to facilitate thread creation, voting on replies, etc.
- Implemented a database solution for accessing threads, reducing load time by 19%, using MySQL and XAMPP