

# Matt Zhang

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## Skills

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**Languages:** JavaScript/TypeScript, C#, Python, C, C++, HTML, CSS/LESS, Java, SQL

**Frameworks:** React, Angular/AngularJS, Vue, Node.js, Express, Flask, Bootstrap

**Technologies:** MongoDB, PostgreSQL, WebSockets, RabbitMQ, Azure, Git/Hg

## Experience

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### Fullstack Developer

Imagine Communications

AngularJS, Vue, C#, TypeScript, PostgreSQL, WebSockets, RabbitMQ

May – September 2021

- Built management dashboards for **10+** top international TV broadcasters using **AngularJS** and **Vue**
- Triage & fixed critical authentication bugs in **C#** backend blocking **35%** of users from using products
- Reduced complexity and file size of product deployment by **75%** using **WebSockets** and **RabbitMQ**
- Launched data aggregation pipeline to normalize **PostgreSQL** databases reducing storage size by **25%**

## Projects

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### DoxMy.Tech 🌐

React, Flask, Bootstrap, PostgreSQL, Azure, Python

- Built fullstack web app using **React** and **Flask** with **PostgreSQL** database for social media analytics
- Created **RESTful** API to aggregate social media data for sentiment analysis and entity recognition
- Deployed modular **Flask** server and data pipelines to clean and standardize data
- Visualized processed data and **Azure** Text Analytics on responsive **React/Bootstrap** website

### watNext 🌐

React, MongoDB, Node.js, Express

- Developed fullstack **React/Node.js** web app to allow users to socialize and to track deadline and events
- Implemented **JWT**-based authentication using **MongoDB** to store user profiles
- Built **RESTful** API with **Express** using **Mongoose** to serve users todo lists and process comments

### Sir Goose 🌐

TypeScript, MongoDB, OAuth

- Authored moderation tools for UWaterloo-affiliated Discord bot serving **10000+** users & **20+** servers
- Developed **OAuth** solution integrated with **MS Graph API** to verify students by program and year

### GrammarHammer 🌐

JavaScript, Python, Azure

- Engineered a device to give users physical feedback based on an **ML** analysis of their spoken grammar
- Queried **Microsoft Azure**'s speech-to-text API to transcribe **Arduino** recorded speech in real time
- Created and trained an **NLP** model to check for grammatical correctness with **80%** accuracy

## Education

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### University of Waterloo

Bachelor of Software Engineering (BSE) – **GPA: 92.1%**

Waterloo, ON

2020 – Present