

ANDY ZHAO

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TECHNICAL SKILLS

Front End | React, Angular, JavaScript, HTML, CSS, Kotlin, Swift

Back End | Node.js, Python, C, C++, C#, Java, Django, MongoDB, Redis, PostgreSQL, SQLite, PowerShell, Regex

Testing/Deployment | Amazon Web Services, Terraform, JUnit, Jest, Pytest, Mocha, Chai

Developer Tools | Docker, Git, npm, Postman, Agile Methodology, CI/CD

EXPERIENCE

Software Engineer | Manulife Financial

May 2024 - Present

Software Engineer | EzeeAssist

Sept 2023 - Dec 2023

Backend software development for chatbot system

Python | JavaScript | AWS | PostgreSQL | MongoDB

- Built a data import system with **Django** and **Node.js** that automated client file parsing and bulk import of client data, increasing client onboarding speed by **>95%**
- Implemented **data pipelines** utilizing Amazon **SNS** and **SQS** to achieve real-time synchronization of critical data updates between various microservices
- Created and integrated **30+ APIs** to facilitate streamlined data management and optimize frontend operations
- Wrote and documented JavaScript and Python scripts for the initial message processing stage and user authentication

Application Developer | Allstate Insurance Co of Canada

May 2022 - Aug 2022

Backend system and software enhancements

Python | C# | PowerShell | Java | JUnit

- Developed a file processing engine using Python, generating over **3 million** policy documents, saving over **1700 hours** of recurring manual work, and resolving **52k** customer requests to download policy documents
- Developed PowerShell scripts to automate service restarts on servers, resulting in significant time savings of several hours (**>2hrs**) per week
- Built software in **C#** that digitizes paper documents, utilizing image and text recognition to extract and validate data
- Created JUnit and comprehensive integration tests to validate and debug internal enterprise API

Software Developer | Benevity

May 2021 - Aug 2021

Multi-feature employee engagement Slack application

Python | AWS Lambda | AWS API Gateway | Terraform

- Designed and developed a **company-wide Slack application** with Python, providing users with a suite of commands that resulted in a **28%** increase in employee engagement with charitable causes and philanthropies
- Utilized Terraform to automate the provisioning and management of cloud infrastructure for **Lambda functions** and **API Gateway** and built pipelines that trigger on every PR
- **Merged code into production** and integrated application into Benevity's Slack workspace

PROJECTS

Ghosted | Website, [GitHub](#)

- Created a **full stack** web application with React, Node.js, and SQLite, that conducts **data analytics** on a user's iMessage and Contacts database
- Designed and implemented **complex queries** to return analytics such as most texted friends, sentiment analysis, and suggestions for who to keep in touch with to gain insight to one's relationships and texting habits

Menu Finder | Website, [GitHub](#)

- Built **React** application to compare, filter, search, and view restaurants and their menu items within the University of Waterloo area
- Conceptualized and designed **frontend** and implemented **backend** routes linking website to JSON database

EDUCATION

University of Waterloo - Bachelor of Computer Science Co-op

2020-2025