Yimeng Xie

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SKILLS

Tools and Languages Python, JavaScript, Typescript, C++, Git, Java, C, Kotlin, C#, Unity, React, SQLlite, NodeJS, NestJS, Mi-

crosoft Azure DevOps, Azure Language Services, Cosmos DB, Gremlin, SEQ, Racket, Unix shell, HTML,

CSS, LTFX, Microsoft Office

Technical Knowledge Functional Programming Paradigm, Imperative Programming Paradigm, Object-Oriented Programming

Paradigm, CQRS architecture, building RESTful APIs, Advanced knowledge of algorithms and data struc-

tures, Logical and mathematical thinking

Soft Skills Communication in English and Mandarin, Strong presentation skills, Working under stress, Working with

a team

WORK EXPERIENCE

Software Engineering Intern at Cloudspark Labs

Sept 2022 — Dec 2022

- Developed on company's core product, a suite of Microsoft Teams apps are built as microservices that use CQRS architecture
- Reduced query times by multiple seconds through refactoring **backend REST APIs** to use efficient queries and pagination with continuation tokens
- Refactored codebase to use core libraries and removed 3 unnecessary dependencies, increasing code maintainability and making future development easier
- Used **Azure Conversational Language Understanding** and **Azure Custom Question Answering** APIs to build a MS Teams bot that can be configured by users and independently answer questions. Fully completed project within deadline of one month
- Worked closely with front-end developers, back-end developers, product manager, and other interns to push new features and fixes to product monthly

PERSONAL PROJECTS

Tensorflow Twitter Bio Generator

2021

- Gathered over 2MB of Twitter Bios using Twitter API and Python
- Built and trained Tensorflow machine learning model to continue bio text, trained until loss stopped decreasing around 7.6
- Built web-based application front-end to generate bio from user-inputted text using Django, CSS, and Bootstrap

Word Guesser Web Game

2022

- A web game using React for front-end and Firebase as the back-end
- Users can authenticate using google, join and create game rooms, and play a simple hybrid of Wordle and Pictionary with their friends
- Uses Firestore database to store game rooms and user data and facilitate real-time interaction

Suit Your Job

September 2022

- Created with a team in 36 hours, a web app that allows users to rank jobs using natural language processing
- · Built front-end using Flask, scraped over 700 jobs from job sites using SerpAPI and web scraping
- · Leveraged Co:here's NLP API to compare job similarity to user's ideal job with semantic search
- Finalist for best use of Co:here API award in Hack The North 2022

Unity Games

2019 - 2022

- Created 6 unique and functional games using Unity Engine and C# scripting
- Used object-oriented programming to create modular and robust games that can be easily expanded upon
- Experimented with simple AI, procedural generation, and singleton patterns for saving data
- Worked under time constraint and pressure to complete games for game jams in as little as 2 days

Android Applications

2021

- Designed and developed a calculator app and productivity app using Android Studio
- Implemented changing between pocket and scientific modes when phone is held in portrait and landscape orientations
- Developed productivity app with push notifications for setting timers and **SQLite** databases for storing tasks on a to-do list for two-day Hackathon

EDUCATION

Bachelor's Degree in Computer Science, Co-op, Artificial Intelligence Specialization, *University of Waterloo*

2021 - 2026

Math National Scholarship, University of Waterloo President's Scholarship of Distinction, University of Waterloo

3.98 GPA, 4.00 Math Faculty GPA

International Baccalaureate Diploma, Maple High School

2021

ACTIVITIES

Member of University of Waterloo Computer Science Club, Data Science Club, and Women in Computer Science Competitive Programming on DMOJ and LeetCode, over 400 problems solved in total

2021 - 2022

2019 - 2022