# Annie Guo

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in <u>anniewquo</u>

## Skills

Languages: Python, Javascript, Typescript, C++, C#, C, SQL, Bash, HTML, CSS Database & Tools: AWS, MS Azure, MS SQL, MongoDB, Docker, Git, Postman, Figma Libraries: OpenCV, Tensorflow, PyTorch, NumPy, Matplotlib, Pandas, Scikit, Tailwind

Frameworks: ReactJS, NextJS, ExpressJS, NodeJS, ASP.NET Core, Flask

## **Experience**

#### Software Engineer Intern

Waterloo, ON

Descartes Systems Group

May 2024 - Aug. 2024

- Developed backend geocoding services for clients to validate and search for addresses using C# and MS SQL
- Supported the migration of company applications onto the .NET Core framework by refactoring existing codebases, implementing MVC architecture, and resolving 20+ bugs
- Reduced application response times by ~700ms through the integration of in-memory caching mechanisms

## Software Engineer Intern

Toronto, ON

Eon Media

Sep. 2023 - Dec. 2023

- Continued development work on an Al pipeline, collaborating with a team of three engineers to implement brand recognition features for a large repository of archival videos and sports broadcasts
- Created API endpoints using Nginx and Flask allowing the frontend to retrieve and modify video metadata
- Led the encoding process of 7,500+ MP4 files into watermarked HLS playlists with Python and AWS Lambda
- Designed an autocompletion system out of an Elasticsearch database to optimize search features for brands
- Worked closely with various AWS services, especially EC2, S3, Lambda, IAM, and VPC, identified areas of high expense and implemented strategies to mitigate costs resulting in over \$2000 of monthly savings
- Built an automated chatbot application to deliver hourly updates on active pipelines to the AI team over Slack

# **Projects**

#### iSpy Facial Recognition System 🔀

Python, OpenCV, Numpy, Keras, Google Cloud, Flask, React, Javascript, Tailwind, HTML

- Developed a full-stack face recognition app using Keras and OpenCV, achieving accuracies above 90%
- Built a React user interface to view and edit training data stored in GCS and update the model
- Integrated a Flask server hosted on VPC to handle requests for database interactions

### Personal Portfolio 🗹

React, HTML, Javascript, CSS, AutonotionR, Spotify API, Figma

- Designed an interactive personal portfolio utilizing React, Javascript and CSS that includes stylish JSX components, animations, light and dark themes as well as an email webform
- Leveraged Notion API to transfer content within Notion pages onto the website for increased scalability
- Integrated Spotify API, adhering to the OAuth 2.0 protocol, to retrieve and showcase real-time Spotify data

## 2187 Interactive Webgame 🔀

Javascript, HTML, CSS

- Programmed an object oriented implementation of the popular game 2048 that uses multiples of 3
- Displayed the game as a static website created with a combination of HTML, CSS and JavaScript

#### **Education**

#### University of Waterloo

Waterloo, ON

Bachelor of Computer Science

Sep. 2022 - May 2027

- President's Scholarship of Distinction
- Coursework: Object-Oriented Programming (C++), Algorithm Design and Data Abstraction (C), Tools and Techniques for Software Development (Bash), Data Structures and Algorithms, Linear Algebra

# **Other**

Dialects: Fluent in English and Mandarin

Certifications & Training: CS50x Introduction to Computer Science, Stanford Machine Learning Specialization