Joshua Zhu

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Education

University of Maryland, College Park
- ❖ B.S. Computer Science
- ❖ Minor in Statistics

Skills

- ❖ **Certifications:** AWS Certified Cloud Practitioner
- ❖ **Coding Languages:** Python, Java, C, C++, C#, SQL, JavaScript, OCaml, Rust, x86-64 Assembly, Bash
- ❖ **Technical Specialties:** Cloud Computing (*AWS, Azure, OCI, Virtualization/Self-Hosting*), Full Stack (*REST APIs, React, Django*), Parallel Computing
- ❖ **Operating Systems:** Windows, Linux (Ubuntu), MacOS, iOS, Android

Experience

Software Developer Intern | *USDA - APHIS, PGQP*   **May 2024 - Aug 2024**
- ❖ Built a Django + React web application (Django, React, NodeJS, NextJS, MySQL) that served as a database for over a dozen USDA sweet potato virus test results from the past 20 years
- ❖ Worked alongside virologists and other plant biologists to understand features of given data in order to implement software compatibilities and configure efficient deployment

IT Intern | *Montgomery County Department of Housing and Community Affairs*   **June 2022 - Aug 2022**
- ❖ Analyzed and cleaned data for licenses part of the affordable housing project for over 500 homes in Montgomery County, Maryland
- ❖ Upgraded over 50 individual company database devices and trained employees in new software

Projects

Glizzy Vision | *Python, OpenCV, AWS*   **July 2025 - Present**
- ❖ Created a software from AWS Rekognition and Python OpenCV that connects and analyzes live video, generating tracking labels for recognized objects
- ❖ Achieved over 95% success rate in assessing and identifying entities such as common household items, food items, faces, etc.
- ❖ Currently training an computer vision-focused AI model using over 500 data samples to more accurately recognize street signs relevant for vision accessibility

Mini Netflix | *ReactJS, AWS*   **Nov 2025 - Dec 2025**
- ❖ Set up and managed a completely cloud-hosted video player with Amazon Web Services tools, including EC2, S3 Bucket storage, and Amazon API Gateway for user authentication
- ❖ Implemented a method to store video and overall user statistics using Amazon EventBridge and DynamoDB, as data for scalable future optimization

Personal Portfolio Website | *ReactJS*   **July 2025 - July 2025**
- ❖ Created a personal portfolio webpage from scratch that highlights technical skills and experiences using React framework and frontend, backend, and web development skills
- ❖ Hosted using Oracle Cloud computing and configured networking solutions to independently run a webpage on a virtual environment