Mason Zarns

CLICK BELOW

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EDUCATION

UNIVERSITY OF MINNESOTA

B.S. Computer Science
Minor in Chemistry
Dec 2022 | Minneapolis, MN
Cum. GPA: 3.5 / 4.0
Major GPA: 3.7 / 4.0

STRENGTHS

LANGUAGES

Java	Kotlin
Rust	Python
SQL	TypeScript

TECHNOLOGY

Azure	Spring
AWS	Gradle
React	Angular
Docker	PyTorch

COURSEWORK

Software Engineering
Computer Vision
Machine Learning
Artificial Intelligence
Operating Systems
Functional Programming
Biomolecular Engineering
Data Mining

EXPERIENCE

PEARSON VUE | Associate Software Engineer

March 2023 - Present | Bloomington, MN

- Spearhead end-to-end migration of monolithic server architecture to a globally distributed, Azure-based infrastructure.
- Diagnose and triage results-processing defects reported from client-specific test centers around the globe.

CODE42 | Software Engineering Intern

May - Dec 2022 | Minneapolis, MN

- Implemented feature to allow customers to change file retention policies and have those changes reflected across various AWS resources, using Spring Boot microservices.
- Integrated acceptance testing into pipeline by automating setup/teardown of ephemeral testing environments, using Terraform.

COMPETITION

OPEN MONKEY CHALLENGE

Dec 2022 | Minneapolis, MN

- Collaborated to design, train, and submit two novel Neural Net architectures to Pose Estimation Benchmark.
  Built using Python, PyTorch, OpenCV

CODE42 HACKATHON

Aug 2022 | Minneapolis, MN

- Worked in team of four to integrate archive file streaming tool into Code42 agent, enabling existing code to evaluate risk of zipped directories without the costs of unzipping massive archives.

PROJECTS

PORTFOLIO WEBSITE | Click Me!

March 2023
Built using React, Node.js, Next.js, Typescript, Tailwind CSS

GESTURE RECOGNITION | Webcam Utility

January 2023
Implemented lightweight webcam utility to track hand gestures in real-time. Supports mouse, brightness, and volume control.
Built using Python, Mediapipe, OpenCV

VOTING MACHINE | Instant Runoff Voting

January 2023
Implemented WebSocket server to collect votes. Added visualization code to help users understand the surprisingly elusive algorithm.

MONTE CARLO TREE SEARCH AGENT | Board Game AI

July 2022
Implemented Monte Carlo Tree Search, Expectimax, and Alpha-Beta Pruning algorithms in my favorite board game, Quoridor.