Jason Zheng

EDUCATION

Cornell University • B.A. Computer Science Ithaca, NY · Expected May 2025 GPA: 3.985 • Courses: Machine Learning, Computer Vision, Computer Graphics, Operating Systems, Algorithms

EXPERIENCE

Boeing • Software Development Intern

- Spearheaded a cloud migration initiative for a suite of microservices to Amazon EKS, supporting Electronic Flight Bag solutions used by 100,000+ pilots
- Developed a reusable GitLab CI/CD pipeline that reduced deployment times by 75%, using Helm charts and ArgoCD for automated Kubernetes deployment
- Enhanced vulnerability detection by integrating JFrog Xray and other security/static analysis tools into the CI pipeline, leading to vulnerability discoveries in 2 production services

Duck Creek Technologies • Software Engineering Intern

- Designed and implemented backend API endpoints to handle business logic for an insurance claims management solution processing 30 million+ claims, using C#, ASP.NET, and Azure SQL
- Created comprehensive server regression tests using an in-house automated testing tool to ensure code quality

Bayer • Software Developer Intern

- Implemented major UI/UX enhancements for 5+ pages across 2 web apps by creating Figma mockups using responsive design principles and developing frontend components with React, Node.js, and MUI
- Boosted developer efficiency by collaborating with team members to simplify the structure of data transfer objects and reduce technical debt

PROJECTS

LFBI Volunteer Platform • Product Manager, Technical Lead Hack4Impact Cornell • Jan 2023 - Present

- Led a cross-functional team of 16 developers and 4 designers to create a volunteer management web app for supporting Lagos Food Bank's network of 20,000+ volunteers
- Designed the system architecture to align with product requirements, including the Firebase user authentication flow, the Next.js frontend component structure, the Node.js backend API, and the PostgreSQL database schema
- Supported team members by organizing weekly sprints over 9 months, assigning 60+ tickets, leading code/design reviews, mentoring new members, and actively collaborating on deliverables

Sketchify • Technical Lead

- Cornell Data Science Feb 2024 May 2024 Led a team of 8 developers to create a cross-platform Electron app that transforms images into infinite-resolution coloring book pages using image segmentation, convolutional neural nets, and Canny edge detection
- Facilitated development efforts by planning bi-weekly sprints, collaborating with developers on the ML pipeline, and integrating the Electron frontend with the ML backend

MathSearch · Developer

 Leveraged Amazon S3 to develop core frontend components that communicate with a server-side ML model for a React web app where users can search for LaTeX expressions in PDFs

Quantum Chess · Developer

 Collaborated with a team of 4 to develop a terminal-based chess game in OCaml loosely based on quantum mechanics principles, including superposition and wave function collapse for chess pieces

Earth Legislator • Developer

Hack4Impact Cornell • Feb 2022 - Dec 2022

 Developed UI components and API endpoints to retrieve, display, edit, and download data from Google Docs/Sheets for a React web app that enables the Earth Law Center to distribute environmental law templates

SKILLS

Languages: Python, Java, JavaScript, TypeScript, OCaml, C, C++, C#, HTML, CSS Frameworks: Next.js, React.js, Node.js, Express.js, Prisma, Tailwind, GTK4, ASP.NET, Flask Linux / DevOps: AWS, Docker, Kubernetes, ArgoCD, Helm charts, Ubuntu, Fedora/RHEL, bash

Remote • May 2024 - Aug 2024

Remote • May 2023 - Aug 2023

Creve Coeur, MO · May 2022 - Aug 2022

Cornell Data Science • Aug 2022 - Dec 2023

Feb 2023 - May 2023