

Spike O'Carroll

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EDUCATION

University of California, Irvine

B.S., Computer Science

GPA: 3.95

Expected June 2026

EXPERIENCE

Full Stack Software Intern

Dec 2023 – Sep 2024

Portal AI

Remote

- Shipped 80+ features to a venture-backed startup's AI web browser and LLM interface serving 30,000 users/mo
- Built a high-performance vector database in Rust with SQL query support and cloud syncing with Postgres server
- Launched a conversational voice AI in Python with < 600ms latency, web agent capabilities, and RAG
- Worked closely with fast-paced teams to develop Electron-based browser in Node, TypeScript, React, and Tailwind

Freelance Web Developer

Nov 2021 – Dec 2023

Self-employed

Culver City, CA

- Created high-converting websites for businesses and public figures using Webflow, Figma, and Framer
- Organically increased web traffic by 2-3x for more than 90% of clients through maximizing SEO and page speed
- Designed stunning landing pages and 0→1 web branding featured in 32 Behance and Dribbble collections

Frontend and Webmaster Intern

Mar 2023 – Nov 2023

Maximize Athletic Performance

Los Angeles, CA

- Designed and maintained website, Shopify store, and JotForm assessment form for private gym
- Architected automation pipelines saving 10 hours/week on client processing using webhooks and Zapier

PROJECTS

Web Page Search Engine [↗](#) | Python, NLP

Feb 2024 – Mar 2024

- Engineered a web page search engine in Python, implementing PageRank and cosine similarity for ranking
- Implemented zlib compression reducing index storage by 60% while maintaining search precision
- Created a Streamlit web interface enabling <2 second query response times for multi-word searches

Full-Stack Stock Trading Simulator [↗](#) | React, TypeScript, MongoDB, Express, Node

Jul 2023 – Aug 2023

- Built a real-time stock trading simulator with a React + TypeScript frontend and a Node.js/Express backend
- Constructed an OpenAPI 3.0-compliant API with JWT auth to interface with MongoDB and third-party APIs
- Leveraged AWS to host the backend (EC2, CloudFormation, Cloudfront) and deploy the frontend on AWS Amplify

Scholarship Management SaaS | Python, JavaScript, Cloudflare Workers, Retool, SQL

Jun 2023 – Apr 2024

- Created an internal CRUD tool for Culver City Scholarship Fund with Python, JavaScript, and PostgreSQL
- Allowed for database management, AI data analysis, scoped user authentication, and form automation pipelines
- Designed a user-friendly system serving over 250 applicants, and saving \$8000/year and 40 hours each cohort

Libreddit: Full-Stack Web App [↗](#) | Rust, Docker, HTML, CSS, JavaScript

Jun 2020 – Jul 2023

- Developed a full-stack web app with Rust providing speedy and private Reddit access to 4,000,000 users/month
- Created a custom HTTP2 client/server, providing users a "Time to Interactive" of 2.8s (vs. Reddit's 12.4s)
- Formed a project network comprised of over 100 Libreddit instances hosted by volunteers worldwide

AWARDS — \$120K TOTAL WINNINGS

1st place | UC Berkeley AI Hackathon | Project: DispatchAI [↗](#)

Jun 2024

1st place | UCI Stella Zhang New Venture Competition | Project: Sentinel [↗](#)

May 2024

1st place | LAHacks Google Company Challenge | Project: AdaptEd [↗](#)

Apr 2024

1st place | UCI AI Innovation Challenge in Student Experience | Project: Notive [↗](#)

Jan 2024

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, C/C++, Java, Rust, HTML, CSS, SQL, C#, Go

Frameworks: React, NextJS, Node.js, Electron, Chakra UI, Tailwind CSS, Flask, Django

Developer Tools: Docker, AWS, Git, Firebase, GitHub, CI/CD, Linux, Azure, Shell Scripts, WordPress, CMS

Skills: Open Source, DevOps, UI/UX, Quality Assurance, Machine Learning, Artificial Intelligence, NLP, Excel