Joseph Laurent Krueger

Software Engineer

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EDUCATION

University of Washington (Seattle campus)

September 2022 — December 2024

Bachelor of Science in Computer Science, Minor in Business

GPA: 3.70/4.0

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Clean Power Research, Software Engineer Intern &

June 2024 — October 2024 | Bellevue, WA

- Designed a scalable, fault-tolerant .NET API service that inserts charts into PDFs from interface-defined endpoints
- Extended existing orchestration infrastructure with AWS Lambda to connect with a containerized Node.JS app
- Implemented an Azure DevOps CI/CD pipeline for automated deployment in dev and test environments
- Designed new charts generated for on-demand reports in under 5 seconds used by HVAC contractors across the country
- Wrote technical documentation and automated tests for debugging and monitoring to a production-ready coding standard

Clearvote, Startup Co-founder &

August 2023 — Present | Seattle, WA

- Founded a student-run non-profit developing a cross-functional, open-source Next.js application deployed through AWS
- · Deployed a throttled, high availability RESTful API supporting over over 3000 users during a critical usage period
- Setup a DynamoDB NoSQL database leveraging web-scraped candidate data enriched with finetuned GPT-4o metrics and state geodata boundaries to provide localized election information across the state of Washington
- · Leading prioritization of dependency management, user research, security, cloud architecture and code quality
- Coordinated a marketing campaign with targeted branding, in-person promotions, and social media partnerships

MCG Health, Software Engineering Internship &

June 2023 — September 2023 | Seattle, WA

- Worked on the CareWebQI Team to overhaul an In-patient diagnostic and perscritption tool used by 2,800 hospitals
- Migrated from a deprecated version of Angular to work with a .NET Core backend
- Added auto-completion and code lookup support for 70,000 medical care guideline codes
- Applied agile project management principles in cross-team sprint planning sessions with Confluence and JIRA

The University of Washington, Full Time Teaching Assistant &

January 2023 — June 2023 | Seattle, WA

· Led class sessions, office hours, and individual tutoring for a computer architecture course and a introductory Java course

PROJECTS

Financial Portfolio Rebalancer, Full Stack Application &

April 2024 — Present

- Trade Dashboard: Designed a responsive Flutter application for stock trades, prioritizing accessibility and UX design
- Auto Trader: Developed a C++ Technical Analysis application with data caching to enable sub-5-second stock speculations and >25% YOY returns using an estimated moving average algorithm
- Time Series Forecast: Designing a Kubernetes cluster integrated with Prometheus and Grafana to ingest preprocessed stock data and train a supervised regression machine learning model for stock price time series forecasting

DubHacks Hackathon, illustrAltor — Winner &

October 2022

Winner from 455 participants building a Flask app that makes picture books out of novels with AI generated images

SKILLS

Languages: Java, TypeScript, Python, C#, Dart, C++, Shell scripting (PowerShell, bash)

Node.js, .NET, Flask, React, Next.js, Vue, AngularJS, Flutter (cross-platform mobile development), Frameworks:

DevOps: CI/CD (Azure DevOps, GitHub Actions), SRE practices (SLIs/SLOs, error budgets)

Cloud: AWS (RDB, DynamoDB, EC2, S3, API Gateway), Azure, GCP, Serverless computing (Lambda) Infrastructure: Kubernetes, Docker, Linux admin, Distributed systems (CAP theorem, consensus protocols)