

PROFESSIONAL EXPERIENCE

JPMorgan Chase & Co | Software Engineer

Feb 2024 - Present

- Spearheaded a centralized legal application hub integrating 10+ services; implemented click analytics, resolved complex security/rendering issues, and built dynamic data grids to enhance UI/UX and testing workflows
- Delivered a new NDA processing React.js app within 7 months, automating manual workflows and enabling functionality beyond legacy SharePoint tools
- Played a key role in implementing a revamped workflow process for the submission, review, and completion of a document, including leading the migration of legacy processes into a modern codebase and transitioning data storage from Oracle to MongoDB, resulting in enhanced scalability and reduced maintenance overhead
- Reduced post-release defects by leading a Selenium/Cucumber test coverage expansion, improving release reliability and boosting team confidence in code quality
- Managed and maintained four React applications used to streamline and automate legal document management processes, improving operational efficiency and user satisfaction

JPMorgan Chase & Co | Software Engineer Intern

Summer 2023

- Built a React.js tool that automated tech risk report generation and introduced persistent updates and annotations not possible in prior tools
- Saved 3 hrs/day equating to ~\$70,000/yr by automating report creation utilizing Python, Flask, and PostgreSQL

Freelance Resort Real Estate Data Collection Platform

Summer 2023

- Built a Python-based data collection system for 7 resorts to automate dynamic room price monitoring, saving 60 hours of manual work quarterly

John Deere | Software Engineering Intern

Summer 2022

- Rebuilt C# simulation management tool, enabling 10 vehicle teams to efficiently test embedded controllers

Crown Battery Manufacturing | Engineering Intern

Summer 2021

- Led human-machine interface upgrade project generating lowered inventory costs and maintenance downtime

PROJECTS

NbaQL Interpreter & UI (C, SvelteKit, Docker)

paulkoenig.dev/nbaql/build-a-query

Interpreter for the developed language 'NbaQL' allowing a user to easily search and explore NBA data trends

NCAA Basketball Game Prediction Program (Python, PyTorch)

End-to-end system with custom scraper, forecasting pipeline, and testing suite; 73% accuracy (vs. TeamRankings 71.2%)

LANGUAGES & SKILLS

Languages/Frameworks: C, Golang, Java, Python, JavaScript (React, TS, Svelte), SQL

Tools/Concepts: Databases (Relational, NoSQL), APIs (Spring Boot, Flask), Testing (Jest, JUnit, Selenium), AWS, Linux, Git

EDUCATION

B.S. in Computer Science & Engineering, The Ohio State University

2020 - 2023