

## PROFESSIONAL EXPERIENCE

### JPMorgan Chase & Co | Software Engineer

Feb 2024 - Present

- Delivered a centralized legal application hub used by over 300 attorneys, with a planned expansion to 1000 users by year-end. This platform integrates 10+ legal services, leveraging Spring Boot and Elasticsearch for universal search and implementing behavioral analytics to increase user insights
- Delivered a new NDA processing React.js app within 7 months, automating legacy manual workflows and expanding functionality beyond SharePoint tools
- Led migration of legacy document workflows to a modern codebase, transitioning storage from Oracle to MongoDB, improving scalability and reducing maintenance overhead
- Reduced post-release defects by expanding Selenium/Cucumber test coverage, enhancing release reliability and team confidence in code quality
- Managed and maintained four React applications used to streamline legal document management, increasing operational efficiency and user satisfaction
- Mentored junior engineers providing guidance on best practices and onboarding to the workforce

### JPMorgan Chase & Co | Software Engineer Intern

Summer 2023

- Built a React.js tool to automate tech risk report generation, introducing persistent updates and annotations unavailable in prior tools
- Automated report creation using Python, Flask, and PostgreSQL, saving \$70,000/yr

### Freelance Resort Real Estate Data Collection Platform

Summer 2023

- Built a Python-based data collection system using BeautifulSoup and Selenium 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](http://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%)

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## LANGUAGES & SKILLS

**Languages & Frameworks:** C, Golang, Java, Python, JavaScript (TypeScript, React, Svelte), SQL

**Databases & APIs:** Relational & NoSQL, MongoDB, Spring Boot, Flask

**Tools:** Docker, Kafka, Nginx, AWS, Linux, Git, Selenium, JUnit, Jest

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## EDUCATION

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

2020 - 2023