

Paul Yi

New York, NY
(212) 814-8732
paul.seung.yi@gmail.com

<https://psycodes.com>
<https://linkedin.com/in/paul-s-yi>
<https://github.com/paul-s-yi>

TECHNICAL SKILLS

Languages: Javascript, TypeScript, HTML/CSS, Python, SQL (PostgreSQL, MS SQL Server), Bash, VBA, C++
Frameworks: Vue.js, Nuxt.js, React.js, React Native, Next.js, Node.js, Express.js, Electron, Cypress, Selenium
Developer Tools: AWS (Amplify, EC2, Terraform), Git, GitLab, GitHub Actions, Kubernetes, Docker, Webpack, Vite, PlanetScale
Libraries: D3.js, TailwindCSS, Pandas, Jest, Vitest, Chart.js, Moment.js

WORK EXPERIENCE

Kythira - Software Engineer

May 2023 - Present

- Developed a desktop application interface for Kubernetes, providing budding developers an easy tool to understand container management
- Deployed desktop application using Electron, leveraging IPC protocols to securely communicate with Node.js environment and establish tamper-proof functionality, preventing remote code executions (RCE)
- Generated interactive graphs using D3.js, for its highly configurable element manipulation and wide variety of preset chart styles, to visualize the structure of local and remote Kubernetes clusters
- Built on Node.js/Express server for its non-blocking I/O to manage requests to the SQL database and the Kubernetes' client API with modularized middleware, maintaining high server security and scalability
- Integrated Prometheus and Grafana to fetch and parse high-throughput monitoring and metrics graphs from local and remote clusters
- Developed endpoints for Kubernetes' JavaScript client API to isolate relevant specifications from clusters hosted both on local machines and serverless architecture, reducing cumbersome interactions with kubectl command line

Narrative I/O - Software Engineer

September 2022 - April 2023

- Designed, implemented, and maintained web applications for a data commerce platform, allowing customers to query, buy, and sell petabytes of data while ensuring data security and privacy through robust encryption and authentication measures compliant SOC 2 guidelines
- Built data visualization components with well-documented libraries such as Chart.js, D3.js, and Moment.js to ensure efficient development, consistent logic throughout the application, and improved maintainability
- Assisted in the design of
- Facilitated migration of the codebase from Vue2 to Vue3 while maintaining the original platform, ensuring 0% downtime during migration and resulting in a 57% faster browsing experience and an improved developer experience
- Collaborated with the backend team to create, test, and modify API endpoints written in Scala, building views for users to write Spark SQL queries and use data pipelines to various data stores (TheTradeDesk, AWS S3, Facebook, etc.).
- Created automated unit and end-to-end tests with Vitest and Cypress to ensure new features that affected the UI and the API would not break existing ones, resulting in 90+% code coverage and a 60% reduction in defective deployment
- Tested and adjusted AWS EC2 instances with Terraform, GitLab, and GitHub Actions, resulting in fewer failed deployments of updated code and automated safeguards for live deployments
- Performed quality assurance (QA) and quality control (QC) checks on a regular basis, offloading responsibilities from the product manager and engineering leads
- Collaborated with product managers to address customer concerns and feature requests, resulting in a 30% reduced ticket backlog
- Wrote and maintained developer onboarding and API documentation, ensuring that tooling and code references are up-to-date
- Worked in an Agile environment, participating in biweekly sprints and daily stand-ups, resulting in refined project milestones, improved cross-team communication, and efficient delivery of software solutions

Weston and Sampson - Engineer

September 2020 - January 2022

- Wrote Python scripts with pandas to automate the process of updating stormwater reports, saving 10+ hours of work per week
- Created a C++ program to estimate stormwater treatment capacities based on historical rainfall records
- Wrote and executed SQL Server queries to generate composite reports and logs of stormwater and wastewater data
- Created Bash scripts to expedite file and folder creation and enforce strict naming conventions across the network

EDUCATION

Northeastern University - B.S. in Environmental Engineering

Obtained May 2020

OTHER INTERESTS

Hiking - Tea - Chess - Go - Settlers of Catan - Game Development