John Dunn | Software Engineer

San Francisco, CA | johnwdunn20@gmail.com | (415) 385-0430 johnwdunn.com | linkedin.com/in/johnwdunn | github.com/johnwdunn20

EXPERIENCE

Climb Healthcare, San Francisco, CA

Software Engineer April 2024 - Present

- Standardized an ELT process to import hospital data via SFTP into a SQL database, enabling scalability and flexibility across different hospital providers, reducing data import time by 65% and client-onboarding by 50%
- Created Python programs to generate 270 and parse 271 EDI and integrated with payer portals, leading to a \$200k annual revenue increase
- Implemented a system to price claims at Medicare's OPPS rate, increasing revenue by \$400K annually
- Automated payer denial letter parsing and normalized data into standard schemas to reduce manual effort and allow for more efficient review, saving \$50K in annual costs

Cloudmed, an R1 RCM Company, San Francisco, CA

Senior Group Product Manager

January 2021 – September 2023

- Led the initial build of a Contract and Rule Engine that combined all legacy applications into a single platform, increasing transitioned service line revenue by 209% and decreasing new client onboarding time by 18%
- Transformed the Rule Engine to allow internal teams to create more complicated and targeted rules in Spark SQL, resulting in a \$107M annual revenue increase
- Deployed an 835 remittance standardization system that increased analysts' efficiency in overturning denied claims by 34% and reduced new client onboarding time by 18%
- Built complex models in DataBricks using Spark SQL & Python to identify and resolve both payer and provider data discrepancies

Triage Consulting Group (acquired by Cloudmed), San Francisco, CA

Software Engineer

September 2018 – January 2021

- Owned Triage's Contract Engine that prices 10M hospital claims per month and identifies contractual underpayments for 150 health systems
- Designed claims pricing algorithms and optimized SQL performance through comprehensive query tuning and indexing reviews, resulting in reduced runtime and minimized server strain
- Architected and programmed a version management system that improved traceability of claims' expected reimbursements, streamlined the resolution of underpaid claims, promoted data integrity, and decoupled systems to reduce SQL deadlocks by 12%

PROJECTS

React Query Rewind | Official Tanstack Community Package

Software Engineer

September 2023 – April 2024

- Developed a memory-efficient custom React component in TypeScript and built a long-lived two-way window messaging system to enable real-time data synchronization between our npm package and devtool, allowing developers using the state management tool TanStack (React) Query to time travel state directly in the browser, resulting in 1K+ daily active users
- Customized third-party libraries and created an SDK to format state data, highlight JSON property changes (additions/updates/removals) between state changes and allow JSON nodes to be expanded/collapsed to streamline the debugging process for developers
- Optimized browser performance and compatibility by configuring Webpack for minification and Rollup for efficient bundling

SKILLS

Python, TypeScript, HTML, CSS, React, Next.js, TanStack Query, Node.js, FastAPI, Pandas, Tailwind CSS, SQL, Azure, GitHub

EDUCATION

University of California Santa Barbara (UCSB) Scrum Alliance Certified Scrum Product Owner Microsoft Certified: Azure Fundamentals

June 2018 July 2021

Interests

• Skiing, mountain biking, chess, cooking