

John Dunn | Software Engineer

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SKILLS

Strong: TypeScript, Python, HTML, CSS, React, Next.js, TanStack Query, Node.js, Express.js, FastAPI, Mongoose, Tailwind CSS, JSON Web Tokens, Microsoft SQL Server, PostgreSQL, MongoDB, GitHub, Jira, Azure DevOps, Confluence, Notion, Balsamiq, Lucid
Experienced: Bcrypt, MUI, Pandas, AWS, Google Cloud, Kafka, Docker, DataBricks, Webpack, Rollup, Jest, React Testing Library, CI/CD

EXPERIENCE

Climb Healthcare, San Francisco, CA

Software Engineer (Contract)

April 2024 – Present

- Created Python programs to integrate SQL databases with the Centers for Medicare & Medicaid Services (CMS)'s Integrated Outpatient Code Editor (I/OCE) and Outpatient Prospective Payment System (OPPS) to price 1 million claims annually
- Standardized an ETL 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%

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
- 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

Cloudmed, an R1 RCM Company, San Francisco, CA

Senior Group Product Manager

January 2021 – September 2023

- Transformed the Rule Engine to allow internal teams to create more complicated and targeted rules in Spark SQL, resulting in a \$107M 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 clients
- 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

Open Forge – Find like-minded engineers

- Hackathon Challenge Winner at DevPost's DeveloperWeek 2024, the nation's largest challenge-driven hackathon
- Implemented serverless functions in Next.js to handle user requests and generated dynamic routes, enhancing application scalability

Med Schema Sync – Resolve healthcare data schema discrepancies

- Developed a FastAPI server for the Google AI Hackathon to standardize healthcare data schemas, transforming disparate data into a unified format and suggesting schema modifications to improve data interoperability

Super Market Sorter – Automatically sort groceries by aisle

- Utilized Express to efficiently handle concurrent HTTPS requests via MVC formats to authenticate users, use third-party APIs, and make CRUD updates in the MongoDB database
- Containerized application with Docker, deployed with AWS Elastic Beanstalk, and configured EC2 Load Balancer for HTTPS redirection

EDUCATION

University of California Santa Barbara (UCSB)

June 2018

Scrum Alliance Certified Scrum Product Owner

July 2021

Interests

- Skiing, mountain biking, chess, cooking