John Dunn | Software Engineer

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

SKILLS

Strong: TypeScript, Python, HTML, CSS, React, Next.js, TanStack Query, Node.js, Express.js, FastAPI, Mongoose, Pandas, Tailwind CSS, JSON Web Tokens, Microsoft SQL Server, PostgreSQL, MongoDB, GitHub, Jira, Azure DevOps, Confluence, Notion, Balsamiq, Lucid
Experienced: Bcrypt, MUI, 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 4 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, resulting in 400+ daily active users and a 10% weekly growth rate
- 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