RAY QIN

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EDUCATION

University of California, San Diego, San Diego, CA   Sep 2019 – Mar 2023
- **B.S. Mathematics - Computer Science**, B.S. Mechanical Engineering, **GPA: 3.9+/4.0**, Provost Honors

WORK EXPERIENCE

Eightfold   Jun 2022 - Present
Software Engineer, intern   *Mountain View, CA*
- **Data Warehouse**: Owned several high impact projects that improved current ETL pipelines and the monitoring infrastructure across large scale distributed backend components.
- **Atomic ETL Pipeline**: Authored and implemented a design document for an atomic data loading process. Met team Q2 goal by slashing data inconsistency down to less than 2%.
- **Consistency Tracker**: Extended consistency trackers to company level granularity across monitoring dashboards, email reports, and alarms to 56 tables across RDS / Redshift / Firehose.
- **EMR Dashboard**: Developed a emr debugging dashboard in React. Built a flask api to process logs from s3 buckets and airflow. Enabled engineers to be 40% faster in debugging spark jobs.
- **Engineering Reliability**: Developed unit tests for the CI/CD pipeline. Provided constructive feedback in code reviews. Optimized database queries to avoid timed-out requests.

MEDsmart   Sep 2021 – Mar 2022
Software Engineer, intern   *San Diego, CA*
- **System Automation**: Cut operation costs by 11% in clinics by tracking and automating the medication refill process. Slashed inventory waste by 4% by automating database queries with AWS.
- **Inventory Forecast**: Reduced shortage response time by 7% by generating inventory reports and visualizations. Estimated future usage of medication by Implementing the LSTM algorithm in Python.

PROJECTS

SQLightning   Database Management System
- **Software Design**: Developed a relational database command line terminal with core SQL functionalities in C++. Led software architecture design for the data flows, component interactions, and abstractions.
- **Reliability**: Improved database robustness through input tokenizer, typed-stream encoder, and error reporting system. Increased team reliability by utilizing CI/CD pipeline, unit tests, and integration tests.
- **Performance**: Optimized performance by 83% with the primary key index and the LRU cache system.

Data Storm   Full Stack Development
- **Web Development**: Built a cloud drive and an analytics dashboard with React, Firebase, HTML, CSS, and JavaScript. Collects and analyzes visitor information with JavaScript and Apache server log files.
- **RESTful API**: Designed a RESTful API using Node.js, Express.js, and Passport.js to handle client-side API calls. Implemented secured CRUD routes, authentication, authorization, and custom roles.

SKILLS

- **Tech Stack:** Python, Java, C++, HTML, CSS, JavaScript, AWS, Azure, Docker, React, Node, SQL, Bash.
- **Core Skills:** Backend Development, Cloud Computing, Distributed Systems, Data Infrastructure.