Jian Qin (Ray)

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Education

University of California San Diego Sep 2019 – Jun 2023
Bachelor of Science *San Diego, CA*

- B.S. Mathematics - Computer Science
- B.S. Mechanical Engineering
- Provost Honors, GPA: 3.96/4

Work Experience

MEDsmart Sep 2021 – Mar 2022
Software Engineer *San Diego, CA*

- Implemented time series prediction methods on historic invoice data of thousands of medications.
- Generated inventory reports and visualizations for clinics to understand demands of various services.
- Automated daily database query and synchronization with AWS Lambda, S3, and Fargate.
- Cut operation costs for clinics by tracking medication usage and automating the medication refill process.

Qualcomm Institute Dec 2020 – Jun 2021
Data Analyst *San Diego, CA*

- Acquired and cleaned business data from the Yelp API to improve scalability.
- Integrated datasets to obtain more powerful results across different sources.
- Conducted sentiment analysis with NLP libraries to understand customer reviews.
- Produced insightful correlations and descriptive statistics on interested businesses.

Featured Projects

Cloud Drive XYZ Full Stack Development

- Built full stack cloud-based file system with React frontend and Firebase backend, hosted on Netlify.
- Implemented authentication, authorization, and security rules for data access in Firestore.
- Allows logged-in users to upload and delete files and folders as well as change account information.

Autonomous Vehicle Deep Learning, Robotics

- Design and built a 1/10 scale autonomous car that performs on a simulated city track.
- Implemented Tensorflow deep learning and OpenCV libraries on ROS2 robotic operating system.
- GPU accelerated training with Nvidia CUDA cores. Earned Nvidia Jetson AI Specialist Certificate.

Restaurant Finder Full Stack Development

- Developed full stack review system with PostgreSQL, Express, React, and Node.js.
- Configured database query, server-side routes, and client-side API calls.
- Engineered error handling and form validation for all input fields.

Mars Landing Simulation Engineering Simulation

- Simulated six different trajectories of capsules landing on Mars in MATLAB.
- Integrated parameters including mass, gravity, air density, air drag, thruster, etc.
- Presented data visualization including landing time, speed, and orbital period.

Technical Skills

Programming Languages : Python, Java, C++, HTML, CSS, JavaScript, SQL, MATLAB, Bash.
Technologies : AWS, Linux, Git, React, Firebase, PostgreSQL, MongoDB, TensorFlow, OpenCV.