Samuel Ou

samuelou510@gmail.com | linkedin.com/in/samuel-ou-0510s | github.com/ousamuel | portfolio

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, Java, SQL, HTML, CSS
Frameworks and Libraries: React, NextJS, PostgreSQL, SQL Alchemy, Mongoose, Node, Express, Flask, Tailwind
Developer Tools: AWS, Git, JUnit

EXPERIENCE

Software Engineering Fellow   Jul 2024 – Present
Headstarter AI   *Remote*
- Built 5+ AI apps using NextJS, OpenAI, Pinecone, StripeAPI with 98% model accuracy, verified by 1000+ users
- Led the development of AI-powered websites from design to deployment using MVC design pattern
- Coached by Amazon, Bloomberg, and Capital One engineers on Agile, CI/CD, Git, and microservice patterns

PROJECTS

E-Commerce | *TypeScript, React, AWS, DynamoDB*   Jan 2024 – Present
- Utilized AWS Cognito for secure user authentication and DynamoDB for scalable database management
- Implemented responsive web design to provide seamless user experience across all screen sizes
- Improved scalability and reduced operational costs through serverless computing with AWS Lambda
- Conducted end-to-end testing with AWS Appsync to secure payment gateways and protect user data

CashTrack | *TypeScript, React, NodeJS, ExpressJS, MongoDB*   Nov 2023 – Jan 2024
- Created an intuitive dashboard for tracking expenses between users, improving debt and credit visibility
- Reduced data retrieval time and app performance by 40% by designing optimized schema
- Implemented login with secure authentication and session management with Express-Session
- Leveraged schema flexibility in MongoDB to handle complex relationships and nested documents

SteelStance | *React, NextJS, Python, Flask, SQLite, SQL Alchemy*   Oct 2023 – Nov 2023
- Designed and implemented RESTful APIs using Flask to handle user authentication and record management
- Ensured data integrity by validating relationships and constraints between users and records
- Improved performance by implementing custom sorting algorithm of records in table components
- Optimized queries with SQL Alchemy, leveraging in-memory storage for increased speed

Auto Service | *React, NextJS, Python, Flask, SQLite, SQL Alchemy*   Sep 2023 – Oct 2023
- Refactored table components by reducing clutter and using semantic HTML elements
- Created unit and integration tests to prevent conflicting user appointments and market bids
- Styled reusable components using Tailwind, adhering to ADA compliance
- Led code reviews and standups, fostering collaboration and improving code quality

Reddit Clone | *JavaScript, React, Reddit API*   Jul 2023 - Aug 2023
- Developed a dynamic voting system to promote user engagement and provide real-time feedback
- Implemented custom quick sort for simultaneous UI updates and sorting posts by time and popularity
- Designed a submission form with custom form validation to allow users to share new content

LEADERSHIP

Undergraduate TA | *Statistics, Chemistry*   Jan 2021 - May 2023
- Provided one-on-one guidance and academic support to students, helping students gain a better understanding of concepts on assignments and exams
- Provided frequent feedback and fostered open communication with students

EDUCATION

Flatiron School   Manhattan, NY
Software Engineering Bootcamp   *2023*
Stony Brook University   Stony Brook, NY
Bachelor of Science in Biology   *2023*