Roy Wang

Technical Skills

Programming languages: JavaScript (TypeScript) / HTML5 / CSS, Python, Java, Hack, PHP, Swift, C, Pascal, Groovy, Lua, R **Others:** Full-stack Web / Android / iOS development, ReactJS, React Native, Redux, Relay / Apollo, GraphQL, Jest, NodeJS, ExpressJS, MySQL, Postgres, Redis, Presto, Hive, REST, WebSocket, DevOps, Linux, AWS, GCP, Nginx, Kubernetes / Docker

Work Experience

Citadel, Software Engineer, New York

June 2020 - Present

- Designed and built complex, critical and scalable end-to-end data infrastructure to support the firm's daily operations.
- Led initiatives to revamp and modernize tech stacks, UI/UX, workflows, DevOps processes to better meet business goals.
- Partners with the industry's top analysts and researchers to design and develop innovative solutions that visualize
 financial data in a way that allows investment professionals to discover new insights and drives better decision-making.
- Mentored junior engineers on best practices and design principles to ensure continuity of robust software systems.

Facebook, Engineer, Singapore

Jan 2019 - June 2020

- Performance assessment of *Exceeding Expectations* was awarded for driving several high impact projects and produced exemplary, long-lasting results, and consistently exceeding the high expectation across all areas and responsibilities.
- Supported thousands of <u>Facebook Platform</u> developers, providing in-depth technical support and troubleshooting.
- Rebuilt a tool used for daily support ticket triaging in modern technology stack (React, Redux, GraphQL, Relay, Flow, Hack), significantly improving triaging efficiency, test coverage (84%), performance and load time (41% faster).
- Revamped the ticket assignment logic and improved workload distribution globally and ticket turnaround time by >20%.
- Implemented a critical workflow change that improved app review accuracy by 13% to better protect platform integrity.

Deloitte, Contract Consultant, Singapore

Sep 2018 - Dec 2018

 Contracted to build a mobile app (React Native, NodeJS, MySQL) to assist Deloitte managers towards becoming adaptable leaders through gamification and collaboration.

Goldman Sachs, Summer Technology Analyst, Singapore

May 2018 - Jul 2018

- Developed and successfully deployed Java RESTful API (JAX-RS), WebSockets and Java package for use across
 multiple mission critical trading systems in production.
- Created a <u>web app prototype</u> (ReactJS, NodeJS) for improving meeting efficiency by providing real-time speech-to-text transcription, as well as other features such as translations, summarization, classification, searching and recommendation.

X0PA, Full-stack Developer, Singapore

Nov 2017 - May 2018

- Developed an artificial intelligence system for people management that uses data analytics and machine learning to produce valuable predictions for business leaders and employees.
- Singlehandedly managed the entire AWS infrastructure and front-end development (ReactJS), while assisting in various parts of the back-end development (NodeJS) and database administration (PostgreSQL).

Freelance Developer Aug 2011 – Nov 2018

 Developed and commercialized various scripts that utilize computer vision and OpenGL interception to recognize objects and simulate mouse and keyboard inputs to automate tasks.

Education

National University of Singapore

Bachelor of Computing in Computer Science, First Class Honours (Highest Distinction)

accepted for presentation at the renowned ACM Multimedia Conference 2018 in South Korea.

Awards: Outstanding Undergraduate Researcher, Distinction in Software Engineering, von Neumann Programme, Dean's List

Projects

Mobile & Web application: Slions Karaoke

Dec 2017 - Dec 2018

Built a multi-language Karaoke app (React Native, NodeJS, MySQL) for making language learning fun and engaging by providing automated feedback through speech to text translation and gamified lessons. A web portal is also created (ReactJS) for teachers to manage classes, monitor students' progress and identify areas of improvement through the analytics tools.

Awarded I&E Practicum Grant (\$10000) and SoC Innovation Prize (\$2000) 2018. Co-authored a research paper which was

Mobile application: **Bubble Mania** & Jasmine

Jan 2017 - April 2017

Developed 2 iOS mobile games (Swift) that come with pre-packaged game levels as well as an interactive level designer that allows users to create and customise their own levels. Follows the MVC design pattern and object-oriented paradigm to optimise readability, maintainability and scalability. Awarded 2nd Prize on 10th STePS Showcase.