Olin Zhou

✉ olin.zhou.0@gmail.com | ⌂ www.olinzhou.com | in olinz

Experience

Amazon   *Seattle, WA*
Software Development Engineer - Alexa Smart Properties   *Aug. 2021 - Present*

- Designed and developed micro front-ends using React in the Alexa Smart Properties console to help enterprise customers manage name-free invocation Alexa skills and setup automated skills testing in enterprise units.
- Built Alexa Smart Properties skill template UI using React in the Alexa Skill Kit console to help enterprise customers quickly ramp up on and create custom Alexa skills. Lowered average skill development time from 6 months to 2 weeks per skill.
- Developed reporting mechanisms and enhanced tooling that enabled on-demand migrations for Alexa devices from legacy systems based in AWS to new systems based on native Alexa cloud architecture. Migrated 20,000+ Alexa devices spanning over 1,000 properties, such as hotels and hospitals, replacing a manual process which took 5 minutes per device.
- Maintained and monitored Alexa enterprise management REST APIs supporting over 50,000 rooms using Alexa devices in properties such as Disney Resorts and Wynn Las Vegas. Responsible for mitigating outages and identifying and fixing root causes, ensuring a 99.99% service up-time.

MathWorks   *Natick, MA*
Engineering Development Group Intern   *May. 2020 - Aug. 2020*

- Developed interactive tooling using Bash for use by QA engineers that automated and optimized the process of creating OpenStack instances for hosting MATLAB Docker containers, accelerating MathWorks' platform testing process by 50%.
- Implemented a web UI using React and a backend API using GlassFish and Java to display and filter 500,000+ testing jobs in MathWorks' internal SQL database based on operating systems, clusters, MATLAB release versions, and date.

Tyson Foods   *Springdale, AR*
Full Stack Intern   *May. 2019 - Aug. 2019*

- Built a full-stack cloud-native web application using React, NodeJS, and SQL to facilitate aggregation of delivery incident statistics, with impact spanning over 100,000 forms submitted per year for use by downstream data analysis and policy teams.
- Used AWS Lambda and Aurora DB for cloud deployment and scaling.
- Led biweekly meetings with clients and stakeholders to discuss project progress and requirements.

Skills

Programming Languages   Java, JavaScript, TypeScript, Python, Bash, HTML, CSS, SQL, C++
Technologies   Node.js, React, MySQL, AWS, Jupyter, JUnit

Education

Texas A&M University   *College Station, TX*
B.S. in Computer Science, Minor in Business   *Aug. 2017 - May. 2021*

Projects

Hangar Hackathon Judging Algorithm   *College Station, TX*
Senior Capstone - 1st place in computer science and engineering   *Apr. 2021*

- Engineered and implemented a hackathon judging algorithm based on ELO ratings with an accuracy of 95%.
- Designed and implemented an UI in Hangar to provide hackathon judges with the next best project to visit based on which project has the highest ELO uncertainty.

Stock Price Pager   *Plano, TX*
Personal Project   *Jan. 2020*

- Architected a web application with React and NodeJS that alerts users through text messages and/or phone calls based on their desired price for a given ticker.
- Leveraged IEX Cloud API for stock prices and Twilio API for user alerts.

Road Conditions   *Plano, TX*
Personal Project   *Sep. 2019*

- Engineered a web application using React and NodeJS to map predicted weather forecasts to a user's trip schedule.
- Developed a custom algorithm to calculate and indicate expected weather per 30 minute interval on a user's trip.
- Integrated with Open Weather API for weather details and Google Maps API for trip routes.