## Xinyi (Oliver) Zhu

xyzhujobs@gmail.com | (531) 218-4276 Seattle, WA

## **EDUCATION**

Northeastern University | Seattle, WA

September 2021 - May 2023

GitHub: github.com/zhuxinyishcn

LinkedIn: linkedin.com/in/zhuxinyishcn

Master of Science in Computer Science

University of Nebraska-Lincoln | Lincoln, NE

August 2017 - August 2021

Bachelor of Science in Computer Science

GPA: 3.97 / 4.00

GPA: 4.00 / 4.00

**SKILLS** 

**Frontend:** Material UI, React / React Native, React Redux

**Backend:** Node.js, Spring Boot, Hibernate **Software / Cloud:** Jenkins, AWS, Firebase

Language: Java, JavaScript, Python

**WORK EXPERIENCE** 

NBCUniversal September 2022 - December 2022

Software Engineer Intern

New York, NY

- Reduced 50%+ AWS Lambda response time and request latency in AWS API Gateway by migrating to AWS Lambda functions to a configurable Python SDK integrating with existing AWS Lambda Layers.
- Created an internal tool for a team of 8 to analyze critical factors (loading times, ad insertion, and playback failures) for client-side video players in performance metrics.
- Derived user behavior reports by implementing **React** components with **Google Analytics** on streaming platforms.
- Performed functional testing, regression testing, and user acceptance testing with Product Team achieving 98% code coverage.

Cummins June 2022 - August 2022

Software Engineer Intern

Indianapolis, IN

- Prototyped a **JavaScript** full-stack web application offering **Partner Engagement Service** to centralized authentication and authorization for external and internal users to access the integration portal.
- Rendered user interfaces with **React / Redux** Hooks aligning with **Material UI** components to manage resources, scopes, and usages in integration workflow.
- Collaborated with Infrastructure Team, migrated engine service data from 8 platforms to remote **Amazon DynamoDB** database by architect **AWS Lambda** functions.
- Constructed a Serverless backend by defining RESTful APIs handling client-side requests to fetch data from Amazon DynamoDB database and return responses in JSON format.
- Built an **OAuth 2.0** authentication pipeline to automate auth state persistence to reduce multiple logins for the same user.
- Followed **Agile** methodology to create, design, iterate and test 6 releases towards the final product and end user delivery.

## RELATED PROJECT

AI-based Food Image Processing: FoodInSight (Cross-Platform Mobile Application)

August 2020 - August 2021

JavaScript, React Native, Firebase, Node.js, MySQL, AWS

[Demo Link]

- Led a team of 5 students to prototype an **Android / iOS** App with **React Native** integrated with **image processing** algorithms to analyze nutrition information identifying unhealthy habits and deliver results through social media.
- Built a backend with **Express.js** to provide real-time diet assessment by querying nutrition data from **USDA FoodData Central** API and weight monitoring through Bluetooth devices.
- Reduced 35% startup time by migrated 40 GB of food ingredients data stored on local disk to Amazon RDS database.
- Deployed the backend through **AWS infrastructures** (**Elastic Beanstalk, Cloud Formation, RDS**) to interact with users to access unlimited nutritious recipes.
- Drove weekly meetings by synthesizing product artifacts, preparing trade-off analysis and troubleshooting production problems across **Android / iOS** platforms.