

# Zihan Lyu

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## 🎓 EDUCATION

### Rice University

M.S. in Computer Science

Houston, TX, USA

August 2021 - December 2022

### Communication University of China

B.E. in Information Security (GPA:3.81/4.00)

Beijing, China

Sep 2016 - June 2020

## 📚 TECHNICAL SKILLS

**Languages:** JavaScript, HTML/CSS, Python, C/C++, Java

**Frameworks:** React, ES6, Node.js, Webpack, Bootstrap, Koa, Flask, Django

**Developer Tools:** Git, Postman, MySQL

## 💼 WORK EXPERIENCE

### Bytedance Ltd. - TikTok Department

Front-end Engineer

June 2020 – May 2021

Beijing, China

Our team is working on a full process management platform called Miigo. The DAU of Miigo is about 20k+, and tens of thousands of data are processed every day, which generated a lot of revenue for the company.

- Implemented features and optimized experience of Miigo using **React+Mobx+Koa**, proficient in the use of **React** frameworks and related tools(**redux|react-router|webpack**)
- Refactored the program code to comply with **ES6** and **Typescript** rules, significantly improving the reusability and readability of the code, and speeding up page rendering
- Designed **SQL** statements to query and update user data, produced **NodeJS** code to implement remote calling of **RPC interfaces**, reducing the response time of multiple interfaces to less than 1 second
- Optimized the UI and the UE interaction of the platform using **Ant Design**, resulting in a 23% increase in new users and a 78% increase in existing user satisfaction
- Organized technology sharing meetings within the team to learn new technologies continuously and promote team communication

### Bytedance Ltd. - TopBuzz Department

Software Engineer Intern

April 2019 – May 2020

Beijing, China

- Designed and developed a Test Code Coverage tool, the front-end uses **Echart+AnimateCSS** to enhance user experience, and the back-end uses **Python** for data filtering and processing. 13+ products of the company connected to this tool. Discovered hundreds of missing cases, prevented at least 70-80 errors from directly publishing to users, and avoided millions of dollars in losses.
- Deployed a small-scale data monitoring and errors alarm platform by using **Vue+Go+MySQL** technology, the tool focuses on back-end data processing to ensure the timeliness and accuracy of feedback. This tool is mainly used in mini-games in Topbuzz, collecting user data to assist recommendation algorithms and avoid program crashes in time.

## 📖 PROJECTS

### A Teaching Quality Evaluation System | Vue, Python, Django, MongoDB

March 2020 – May 2020

- Developed a full-stack web application using **Django** and with **Vue** as the frontend
- Focused on splitting components and using hooks during the development to simplify the codes and improve system efficiency, thus bring a better experience to users
- The CUC is building a more complete and robust system based on my output, and it will be officially put into use in the future

### Go Travel | Vue, Bootstrap, Apache, Git

February 2019 – May 2019

- Developed a visual SPWA that provides users with a traveling guide through positioning techniques
- Utilized **Vue+Bootstrap** to build responsive pages, utilized **Location Based Service** to get the user's location, used **Python** to analyze and calculate the user's favorite travel route, besides, used **Apache ECharts** and **CSS Animations** to virtually display recommend results
- The site has been put into use and under continuous maintenance with a total of 800-1300 users