

Boyue(Olivia) Zheng

☎ (404) 200 0774 • ✉ zby@gatech.edu • in boyue-zheng

Objective: Seeking a **Software Development Engineer Full-time** position

Education

Georgia Institute of Technology

Atlanta, GA

M.S. in Computational Science& Engineering, GPA 3.85/4.0

Jan. 2020 - May 2021 (Expected)

- Coursework: Object-Oriented Programming in Java, Database Systems, Algorithm, Big Data Systems, Machine Learning
- Teaching Assistant of Game AI (CS7632, 2020 Fall)

Renmin University of China

Beijing, China

Bachelor of Economics, GPA 3.24/4.0

Sep. 2015 - June 2019

Skills

Programming: Java, Python, JavaScript, Go, C/C++, SQL, Scala, HTML/CSS

Database: MySQL, MongoDB, Redis

AWS: S3, EC2, CloudWatch, Lambda, DynamoDB

Tools: Linux, Ansible, Splunk, Docker, Git

Frameworks: Spring Boot, Flask, React, Node.js

Work Experience

Application Development Engineer Intern, ADP

Atlanta, GA

Authentication and Identity Management DevOps team

Summer 2020

- Created visualization **Splunk** dashboards with Splunk search processing language to continuously monitor and send alerts for 100+ Apps' authentication-related metrics at both infrastructure and App levels. Automated forwarding log data of Apache HTTP servers to Splunk using **Ansible**
- Implemented REST API with **API Gateway** and created AWS **Lambda function** with Python to manage **EC2** instances, authenticated by **Cognito User Pools**
- Built **Jenkins** CI/CD pipeline of Authentication Gateway with **Bitbucket**, **Docker** and **Ansible** to apply code and configuration changes on Apache Servers

Project Experience

Mutual Fund Transaction Online System - Web App

- Developed a web app based on Spring MVC to support fund transactions and integrated New York Times API to provide recent news about selected funds
- Built relational database with MySQL and utilized Hibernate as ORM. Implemented security workflow for different roles and privileges via in-memory authentication provided by Spring Security
- Developed Apache FreeMarker(Java template engine) based front-end with JS and Bootstrap4 to provide interactive web pages

Help for Community in COVID-19 - Web App

- Developed a web app to enable local businesses to sign up for help, community residents to check updates and donate
- Built back-end by Node.js and Express framework to handle HTTP requests. Built NoSQL database using MongoDB to save user/donation information and utilized Mongoose as ODM
- Designed front-end by React. Integrated Redux Form to gather target amounts and reasons submission. Integrated Stripe API for donation payment
- Implemented authentication flows with Passport.js and Google OAuth

Criminal Rate Prediction of the Chicago City - Data Visualization

- Analyzed the relationship between criminal rate and factors like weather and location for criminal rate prediction based on 10 years of criminal records in Chicago
- Preprocessed data with Python and built prediction model for the crime number in a day with Random Forest Algorithm in Spark MLlib on AWS and achieved $0.65 R^2$
- Visualized the prediction result using D3 and integrating Google Map API