

# Boyue(Olivia) Zheng

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## Education

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### 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 & Analytics, Machine Learning, Information Security
- 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

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

**Database:** MySQL, MongoDB, Redis

**AWS:** S3, EC2, CloudWatch, Lambda, DynamoDB

**Tools:** Unix/Linux, Ansible, Splunk, Docker, Git

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

## Work Experience

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### 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

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### Atlanta Movie Online System Design

- Analyzed IFD and specified EER Diagram for the business logic of Customer-Employee-Oriented system
- Designed relational schema to support all the functionalities and developed MySQL Database
- Implemented Web front-end and Python Flask back-end with RESTful API to provide easy online ticket service for customers, and allowed employees to manage movies and theaters
- **Back-end:** Flask, MySQL      **Front-end:** JavaScript, JQuery, Jinja2, Bootstrap4

### React/Node-based Feedback Collection Web App

- Enabled users to send surveys to clients, consumers or subscribers by entering a list of emails and get feedback collection via Email Provider
- Designed the front-end by React/Redux, used MongoDB as database and integrated Stripe for user payment
- Built the back-end by Node.js and Express, and enhanced authentication flows with Google OAuth authentication

### MOBA Game and AI

- Developed a game world of minions, heroes, towers in a background of random obstacles and dynamic filled gate with Pygame, which supports the battle among two teams. Either team could be AI or human
- Implemented the algorithm to generate navigation mesh and smoothed path network, and navigate agents with A\* shortest path algorithm in real time
- Designed a Finite state machine for minions to flock together and focus fire on a weak target. Created a behavior tree for the hero to dodge bullets and attack towers under the protection of minions