# **CHENXU YANG**

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# **EDUCATION**

**Columbia University** 08/2019 – 12/2020

M.S. in Mechanical Engineering

New York, NY

GPA: 3.83

Xi'an Jiaotong University 08/2015 – 07/2019

B.S. in Aircraft Design and Engineering

Xi'an, CN

**Relevant Courseworks**: Fundamental of Computers, Analysis of Algorithm, Databases, Cloud Computing, C++ Programming, Web Programming, Evolutionary Algorithm, Robot Learning, Robotics, AI, NLP, Data Science

# TECHNICAL SKILLS

Computer Language: Python, Java, C++, JavaScript, HTML/CSS, SQL, Golang, Linux Shell

Framework and Tool: MongoDB, DynamoDB, Neo4j, jQuery, Bootstrap, React, Node.js, Webpack, AWS, Flask, Git, ROS

# **WORK EXPERIENCE**

### Tencent Technology Co., Ltd

06/2020 - 08/2020

Software Development Engineer Intern

- Redeveloped an open source API management platform based on **React** and **Node.js**, customizes its authorization system in both front-end and back-end and integrated it into the company's network environment.
- Bundled all modules with **Webpack** and deployed the platform on a Linux cloud server, applied **MongoDB** for data storage and **Git** for version control.
- Deployed NGINX for reverse proxy and load balancing to make the platform efficient for hundreds of employees.

#### PROJECT EXPERIENCE

#### Travel website based on AWS

09/2020 - 11/2020

- Built a travel websites with Flask, deployed on Beanstalk and integrated with Lambda functions.
- Implement RESTful APIs and login/signup with Amazon RDS combined with email verification and JWT authentication.
- Developed comment model with user association and stored in **DynamoDB**.
- Deployed Catalog Service on Amazon ECS, and used Amazon RDS for storage.

## **Full-stack Movie-Discussing Website**

03/2020 - 04/2020

- Lead a team to build a **RESTful** web app with **Node.js** where users can register to share their favorite movies, upload pictures, post reviews and leave comments with user associations.
- Optimized the layout and used **Bootstrap 4** to make the website responsible and mobile-friendly.
- Implement API endpoints for each model, tested and documented by Postman.
- Managed user data through MongoDB and attained user authentication with JWT & Cookies.
- Enhancing API security by sanitizing data and adding XSS protection, security headers and rate limiting.

#### **Serverless Restaurant Reservation Web**

02/2020 - 03/2020

- Built a serverless and smart restaurant reservation web with AWS S3, API Gateway, Lambda, **DynamoDB** and Cognito.
- Create chatbot using Lex, adopted SQS queue to store information and sent the message by SNS and CloudWatch.
- Crawled all Manhattan restaurant information in Yelp with Requests and stored in Elasticsearch for further search.

#### **Face-detection Web App**

01/2020 - 02/2020

- Built a web app with **React** and **Node.js** which can detect the human face of the picture that user upload.
- Used React to implement the front-end to make the website responsible, and achieved face detection with Clarifai API.
- Implemented a responsible server with Node.js and express.js, and connected to **PostgreSQL** for storing user information.