CHIQU LI

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EDUCATION

Columbia University 09/2019 - 12/2020

Master of Science, Mechanical Engineering (Robotics)

New York, NY

Wuhan, CN

Wuhan University 09/2015 - 06/2019

Bachelor of Engineering, Power System

Relevant Courseworks: Cloud Computing & big Data, Databases, Deep Learning, Data Science, Evolutionary Algorithm

SKILLS

Programming: Python, Java, JavaScript, C/C++, SQL, HTML, CSS, Node.js, jQuery, Linux Shell

Tools: AWS, Microservices, React, Django, Flask, Kafka, RESTful, Git, SageMaker, DynamoDB, TensorFlow

INTERNSHIP

Back-end Intern, Gridology -- New York, NY (Remote)

05/2020 - 08/2020

- Redesigned and implemented Diango PostgreSQL database, optimized the performance of the website
- Created multiple **RESTful** APIs getting data dynamically, data update and extraction speed increased by 50%
- Designed web crawlers on multiple university websites through Beautifulsoup and selenium, improved the scraping efficiency by 50% and deployed it on the server for automatic crawler and data analysis

PROJECTS

Intelligent Door Access System

03/2020

- Established a distributed system on AWS aiming to give access to visitors by recognizing faces and notifying owners
- Designed front end portals for visitors/owners and integrated two web pages with API Gateway and Swagger
- Processed streaming video by Kinesis Video Streams and sent one-time-password to open the door
- Enabled system to send SMS requesting access if it's an unknown visitor and stored new faces into DynamoDB

Full Stack Blog Web Application

01/2020

- Built by Flask and RESTful, users can log in, create, update and delete their existing blog posts
- Used HTML templates, node.js, and WTForms to accept user inputs and used **SQLAlchemy** as an ORM for a database
- Developed this application on local Git, synchronized to Github where remote web server could pull directly

Restaurant Reservation Serverless Website

02/2020

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

Genetic Programming Evolved Robots

09/2019 - 12/2019

- Created a 3D evolved running robot by 5000 generations and integrated multiple evolving methods in C++
- Strengthened GP selection method by using Deterministic Crowding and Hierarchical Fair Competition
- Modeled and Visualized the evolutionary process by openGL

AWARDS

Excellent Student Scholarship 2017 & 2018 1st Prize in National Energy Saving & Emission Reduction Technology Competition 2018 2017

Women's Team Championship of the College Student Tennis Competition of Hubei Province