Chenyu Xi

xi.chenyu@columbia.edu | 646-206-9583 | https://www.linkedin.com/in/chenyu-xi
2050 Central Road, Fort Lee, NJ 07024

Education

Columbia University New York, NY
Master of Science in Electrical Engineering *Expected in Dec 2019*
Courses: Computer Network, Database, Cloud Computing & Big Data, Natural Language Processing, Reinforcement Learning
GPA: 3.92/ 4.00

Tianjin University Tianjin, CN
B.S. in Electrical Science and Technology *Sep 2014 - Jul 2018*
GPA: 3.73/4.00 (top 5%)

Skills

Language: Python, Java, JavaScript, HTML/CSS, SQL
Frame/Tool: AWS, Git, Spring, MyBatis, MySQL, Spark, PyTorch, jQuery, Bootstrap

Professional Experience

Huawei Cloud, Huawei Technologies Co.,Ltd. Shengzhen, China
Java Backend Intern, DevCloud Department *May 2019 - Aug 2019*
- Built data import service and display APIs for DevCloud OpsScreen, which is an operation data display & query service for DevCloud developers
- Designed data storage pattern using MySQL and using Quartz to achieve scheduled data import tasks
- Completed data display APIs using Spring Boot and MyBatis. Modified current SQLs to speed up data query servce

Projects

AWS Serverless AI Dining Assistant *Feb 2019 - Apr 2019*
- Designed a dining concierge chatbot, which offers restaurant suggestions through chatting with users
- Designed frontend user interface with HTML/CSS and jQuery
- Built a restaurant search engine using DynamoDB and AWS ElasticSearch Service
- Implemented user authentication system using Cognito

NYC Job Search Web Application *Oct 2018 - Nov 2018*
- Designed 3NF normalized NYC Job information PostgreSQL database based on NYC open job dataset
- Built web server using Flask, designed web front-end with HTML/CSS and JavaScript
- Designed User/Admin Login system. Allow users to search jobs and add applications; Allow admins to add/delete positions and view user applications, using SQLAlchemy and JavaScript

Hierarchical Object Location in Image using TensorFlow *Oct 2018 - Dec 2018*
- Designed object location model with Deep Q-learning Algorithm that adopts hierarchical image zooming actions
- Encoding images using VGG16 as status descriptor; Designed deep Q-Network to predict Q value given current status
- Model was trained and tested on VOC-2012 dataset, IoU accuracy reaches 65.3%

Research Experience

Neural Acoustic Processing Lab, Columbia University New York, NY
Research Assistant *Feb 2019 - May 2019*
Vocal Track Extraction Using Neural Network
- Designed hybrid deep clustering and conventional networks to extract vocal track from audio files
- Deep clustering network serves as an embedding layer for audio t-f bins; Grouped t-f bins from same source using k-means to make the first description
- Applied CNN which directly mask the vocal track t-f bins to make the second description; Model combines two predictions together to gain better performance