

CHENYU XI

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EDUCATION

Columbia University

New York, NY

M.S. in Electrical Engineering | Data-driven Analysis

Expected in Dec 2019

Courses: Algorithm, Computer Networks, Database, Cloud Computing & Big Data, Natural Language Processing, Reinforcement Learning

GPA: 3.835/4.00

Tianjin University

Tianjin, CN

B.S. in Electrical Science and Technology

Sep 2014 – Jul 2018

GPA: 3.73/4.00 (top 5%)

TECHNICAL SKILLS

Programming Language: Python, Java, JavaScript, HTML/CSS, SQL

Frame/Tool: AWS, Git, Express, Node.js, MongoDB, PyTorch, Keras, TensorFlow

PROJECTS

AWS Serverless AI Dining Assistant

Feb 2019 – Current

- Building a dining concierge chatbot, which offers restaurant suggestions through chatting with users
- Building a chatbot using Amazon Lex; Building web frontend with HTML/CSS and JavaScript
- Using the Yelp API to collect restaurants information, and build a restaurant prediction model using DNN
- Storing restaurant information in DynamoDB; Developing user authentication system using Cognito and IAM

To-Do API

Jan 2019

- Designed a RESTful API with Node.js using Express that allows users add/check to-do events online
- Adopted MongoDB for user data management using Mongoose, deployed API on Heroku

NYC Jobs Web Application

Oct 2018 – Nov 2018

- Designed 3NF normalized NYC Job information database based on NYC open job dataset, using PostgreSQL
- Compiled webserver using Python Flask. Built web frontend 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

Video Content Delivery Network

Oct 2018 – Nov 2018

- Designed a HTTP proxy with Python socket programming that create TCP connections with multi-clients.
- Proxy monitors connection throughput value in real-time and streams the highest quality encoding that connection can handle

Android Apple Ranking Application

Sep 2018

- Designed android app that allows users to check top downloaded songs/movies/paid apps in iTunes Store
- Obtained ranking information and icon URL from Apple RSS Feeds by parsing fetched XML file
- Designed a menu allow users switch ranking board between different areas

RESEARCH EXPERIENCE

Neural Acoustic Processing Lab, Columbia University

Feb 2019 - Current

Research Assistant

- Building music genre classification model with CRNN neural network
- Pre-processing music samples with MFCC; Adopting 5 convolutional layers as feature extractor
- Using 2 GRU layers to summarize temporal patterns on top of CNN layers
- Training model on GTZAN musical dataset, the current model accuracy is 76.89%