

Yuan-Ping Chen

✉ srviest@gmail.com
🌐 <https://github.com/srviest>
🌐 <http://linkedin.com/in/yp-chen>

🏠 Cupertino, CA, 95014
🌐 <http://yp-chen.com>
☎ +1-818-331-0220

Education

University of California - Santa Cruz

Sep. 2016 - Jun. 2018

- Master's degree in Computer Science (GPA: 3.81/4.0)
- Coursework: Distributed System, Cloud Computing, Network Programming, Database System
Machine Learning, Natural Language Processing, Data Mining and Business Analytics

National Chiao Tung University, Hsinchu, Taiwan

Sep. 2009 - Jun. 2013

- Bachelor's degree in Physics

Skills

Programming Languages: Python, Java, C++, Scala, JavaScript, HTML/CSS

Machine Learning Libraries: PyTorch, TensorFlow, Spark MLlib, scikit-learn, NLTK

Tools: Git/GitHub, MySQL, MongoDB, Flask, Node.js, AngularJS, AWS, Spark, Kafka, Cassandra, Docker

Work Experience

Software Engineering Intern, Interactions (AT&T Labs), NJ

Jul. 2017 - Sep. 2017

Deep Learning System for Natural Language Understanding (Spark | MapReduce | PyTorch | CNN | LSTM)

- Developed an end-to-end training pipeline to jointly optimize acoustic model (ASR) and text model (NLP) for customer intent determination, and improved existing production system by 4% on classification accuracy.
- Open sourced first character-level Convolutional Neural Networks for text classification in PyTorch on Github, with 60+ stars.
- Built Spark ETL process to clean and analyze large-scale (>10M) text data.

Machine Learning Research Assistant, Academia Sinica, Taipei, Taiwan

Sep. 2014 - Jul. 2016

Web Application for Online Music Service (RESTful API | Flask | Docker | scikit-learn | SVM) [[link](#)]

- Developed an online music service that automatically generate guitar tab sheet music from YouTube video.
- Used scikit-learn to build SVM for guitar techniques detection and proposed new features to improved model performance.
- Used Flask to support REST API for the service and dockerize the application.

Projects

Multi-threaded Banking System (Java | Multi-threading | Socketing Programming)

- Build a TCP banking client/server to provide services such as user authentication, withdrawals, and deposit.
- Developed concurrent server to handle simultaneous client requests through multi-threading.
- Designed a secure user authentication data storage scheme by storing the hash of salted passwords.

Photo Sharing Web App (Node.js | Express.js | AngularJS | MongoDB)

- Build a web application where users can upload/delete photos, comments, account, tag friends, like and fav photos.
- Used HTML/CSS, AngularJS MVC framework for front end single-page-application design.
- Used Node.js, Express.js, and MongoDB for server development and noSQL database management system.

Real-time Data Analytics Platform (Spark | Kafka | Cassandra | Landoop)

- Built a real-time system to detect emerging topics from live Twitter stream and analyze public opinion about the topic.
- Initiated a data ingestion layer with Kafka to handle feeds from twitter API and visualized Kafka events using Landoop.
- Detected emerging topic with Spark DStream and extracted sentiments using Stanford CoreNLP.
- Developed a data storage layer to store time series data using Apache Cassandra.

Personalized Movie Recommender System (AWS | Spark MLlib | Flask)

- Built a scalable web service for personalized movie recommendation and deployed the service on AWS.
- Supported REST API using Flask and associated the API to a production web server using CherryPy.
- Built model-based collaborative filtering recommendation engine with Spark RDD and MLlib (ALS).

Publications in Machine Learning (Top-tier)

(1) **Yuan-Ping Chen**, Ryan Price, and Srinivas Bangalore,

“*Spoken Language Understanding without Speech Recognition*”

IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Calgary, Canada, Apr. 2018.

(2) **Yuan-Ping Chen**, Li Su, and Yi-Hsuan Yang,

“*Electric Guitar Playing Technique Detection in Real-world Recordings based on F0 Sequence Pattern Recognition*”

Proc. 16th International Society for Music Information Retrieval Conference (ISMIR), Malaga, Spain, Oct. 2015.