

Runze Xu

San Diego, CA, 92122

Phone: (858) 214-4435 | Email: runzexu23@gmail.com

EDUCATION

University of California, San Diego

Master of Science in Computer Science

Major Courses: Networked Systems, Principles of Database Systems, Computer Operating Systems

San Diego, U.S.

Sep. 2018 – Present

Shanghai Jiao Tong University

Bachelor of Science in Information Security

Shanghai, China

Sep. 2014 – Jun. 2018

SKILLS

Languages: Java, Python, C/C++, JavaScript, Shell

Frameworks: Spring(Web: Spring+SpringMVC+Mybatis), Tensorflow(Machine Learning)

Other Skills: Git, Docker, Kubernetes, Ansible, Elasticsearch, Kibana, MySQL, IntelliJ IDEA, AWS, HTML, CSS

WORK EXPERIENCE

Mi-me Financial Information Co.

Software Development Engineer, Infrastructure Group

Jul. 2018 – Aug. 2018

- Implemented the short messaging submodule with Java and Spring Framework for existing notification system shared across multiple business applications.
- Adopted RocketMQ to achieve asynchronous sending, Dubbo to achieve distributed service, Disconf to manage configuration.
- Deployed the module with Kubernetes and conducted unit testing.

Qiniu Cloud

Software Development Engineer, AI Lab

Mar. 2018 – Jun. 2018

- Built a machine learning pipeline to solve a face clustering problem.
- Parallelized data processing scripts to increase efficiency by 8 times and automated data pre-processing by implementing a Python Watchdog that monitored for new uploads.
- Conducted research on clustering algorithms and evaluation metrics to achieve the best result. The F-score of the clustered result was improved from 0.6 to 0.88.

PROJECT EXPERIENCE

DropBox-like Storage Service | UCSD

Oct. 2018 – Nov. 2018

- Implemented a distributed and cloud-based file storage service with Python. Deployed the service on AWS EC2.
- Adopted minimum RTT file block placement strategy to ensure the efficiency of file uploading and downloading.

Operating System Implementation | UCSD

Oct. 2018 – Nov. 2018

- Implemented Nachos which is an instructional operating system with Java.
- Realized functionalities include Threads, Processes, Multiprogramming and Virtual Memory.

Face Transfer with Generative Adversarial Network | Apex Lab, SJTU

Jun. 2017 – Sep. 2017

- Built a deep learning model which can transfer the facial movement from one person to another. Implemented the model with Python and Tensorflow.
- Conducted research on Receptive Field and Generative Adversarial Networks to achieve the best result.
- Wrote a paper (<https://arxiv.org/abs/1710.06090>) and produced a demo (goo.gl/RBbR9y).

Application Layer Firewall | SJTU

Nov. 2017 – Dec. 2017

- Developed a configurable packet filtration firewall based on Linux Netfilter with C++, which supports multiple-rule filtration.

Low-quality Photo Filter | Summer Project, Microsoft

Jul. 2016 – Aug. 2016

- Implemented edge-detection operators with Numpy Vectorized Computation to evaluate image sharpness.
- Trained a machine learning model to detect unqualified store check photos on 30,000 samples. Implemented the model with Python. The detection accuracy reached 92.5%.

Massive Network Data Analysis | SJTU

Mar. 2018 – May. 2018

- Extracted features from 500 Gigabyte netflow data with Elasticsearch and visualized them with Kibana.
- Labeled 100,000 IP addresses with their records from an IP based abuse tracker (badips.com).
- Constructed a machine learning system to detect intrusion. The accuracy reached 86.2%.