

# Zibo Zhang

[zz2492@nyu.edu](mailto:zz2492@nyu.edu) • (858) 900-5375 • New York City

## EDUCATION

### New York University

New York City, NY

*M.S. Computer Engineering*

*Expected Graduation: May 2021*

· Courses: Data Structure & Algorithms, Computer System Architecture, Internet Architecture & Protocols, High Speed Network, Database & SQL, Datacenter & Cloud Computing, Machine Learning, ML for cybersecurity, Data Science for Business **GPA: 3.9**

### University of California, San Diego

La Jolla, CA

*B.S. Environmental Engineering*

*May 2018*

· Courses: Calculus, Linear Algebra, Matlab, Computational Math, Probability, Statistics, Fluid Mechanics, etc.

## TECHNICAL SKILLS

- **Programming:** Python, C, C++, JS/ES6, UNIX Shell, HTML5, CSS3, SQL, MySQL
- **Machine Learning:** Numpy, Pandas, Scikit-Learn, PyTorch, TensorFlow, Keras, NLTK, Gensim, CoreNLP
- **Framework:** Python Django, Flask
- **Development Tools:** Git, Kubernetes, Docker, Hadoop, AWS

## EXPERIENCE

### Alibaba Cloud

Chengdu, China

*Software Development Engineer Intern*

*Jun 2019 - Sept 2019*

- Prototyped and developed RESTful APIs, tested with Postman and shell scripts.
- Developed a Deep Neural Network text classifier with CNN architecture for news articles using TensorFlow and Keras, achieving a 99% accuracy by researching and improving upon StanfordNLP, Gensim, NLTK, and NLP academic papers.
- Developed ETL scripts to extract raw news articles from internal and external APIs, transform (cleaning, segmentation, labeling) for NLP training, and load into MySQL database.
- Automated Word2Vec models training and update with Python for downstream NLP tasks, saving 80% maintenance time.
- Wrote API documentation; composed demos & technical deliverables for clients; managed client meetings.

### New York University

New York, NY

*Graduate Teaching Assistant*

*Aug 2020 - Present*

- Created lab code repositories for Data Center & Cloud Computing course covering Linux, SDN, Wireshark, Mininet, RYU, Hadoop, AWS, Google Cloud, and Kubernetes.
- Co-created lab presentation, lecture recordings; managed lectures and lab sections.

*Graduate Research Assistant*

*Jan 2020 - May 2020*

- Researched on high-performance, low-latency transport protocols, explicit congestion controls, and VoIP loss control algorithms.

## PROJECTS

- Research archives, project docs, and technical blogs built on Jekyll with customized CSS styling, published with Github Pages.
- MIPS 5 Stage Pipelined Processor Simulator & Branch Predictor with C++.
- CNN & RNN Deep Neural Network Text Classifier for news articles in Chinese with Python Keras & TensorFlow.
- FGSM adversarial attacks on a DNN image classifier, and retraining of the DNN model to defend against attacks.
- Full Stack Mock Website developed with MySQL, Python Flask, HTML, CSS, JS with RESTful APIs, jQuery Ajax, and Bootstrap.
- SDN controller programs with RYU to dynamically generate and install flow entries to switches with simple load balancing.
- SDN traffic engineering simulation and analysis with Docker.

## LINKS

Personal Website: [tonyzhang95.github.io](https://tonyzhang95.github.io)

LinkedIn: [linkedin.com/in/zibozhang/](https://linkedin.com/in/zibozhang/)

Github: [github.com/tonyzhang95](https://github.com/tonyzhang95)