



Zhouhan Chen

## TEACHING EXPERIENCE

*Rice University*

Teaching Assistant for Comp310 Advanced Object Oriented Programming August 2016 - December 2016

- Assisted students with designing MVC and RMI paradigms in Java.
- Graded Java programming assignments and held weekly office hours.

Teaching Assistant for Comp540 Machine Learning January 2016 - May 2016

- Coached students on machine learning concepts such as k-means, regression and SVM.

Teaching Assistant for Comp440 Artificial Intelligence August 2016 - Present

- Lead and organize tutoring sessions for students who need assistance with concepts such as constraint satisfaction problem, Bayesian network inference and hidden Markov model.
- Collaborate with professor and other TAs regarding curriculum development.

Nakatani RIES (Research and International Experiences for Students) Fellow Mentor August 2017 - September 2017

- Assisted student researcher with Python programming using Jupyter Notebook to load Light Detection and Ranging data of Houston.
- Helped student researcher to design academic poster and to practice poster presentation skills.
- Resulted in poster “Analyzing Houston Flooding Using Unsupervised Machine Learning”, which has the potential to improve Houston flood control system after Hurricane Harvey.

## PROFESSIONAL EXPERIENCE

*Quantlab Financial*

June 2017 - August 2017

Data Engineer Intern, Houston, TX

- Developed API in Elixir and Phoenix framework to expose realtime trading data to developers.
- Created an Elixir module that pushes high volume market data to Elasticsearch on Kibana every second.
- Created a single page web application with a dynamic chart to display trading data using Chart.js.
- Added automatic web testing framework on Gitlab using Docker, Mocha and NodeJS.

*App Annie*

May 2016 - August 2016

Software Development Engineer Intern, Beijing, China

- Added and improved functionality in the source code of Hue (an open source web interface) to support database connections to Hadoop Hive and Presto query engines to facilitate increased data accessibility for internal customers.
- Developed Python scripts to extract and transform tables from PostgreSQL to Amazon S3.

## COMPUTER SKILLS

- Programming languages: Python, Java, JavaScript, C, Bash, Elixir, Git, SQL, MongoDB
- Web Framework and Cloud Computing: Django, Flask, NodeJS, Docker, AWS (EC2, S3), Hadoop (Hive, Hue), Elasticsearch, tensorflow

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- Data analytics and visualization: Numpy, Pandas, Scikit-learn, Gephi, CanvasJS

### **PUBLICATIONS**

- “Hunting bots on Twitter: an unsupervised approach,” Social Informatics: 9th International Conference, SocInfo 2017, Oxford, UK, September 13-15, 2017, Proceedings, Part II, Page 501-510, 2017
- “The Decline of Social Media Censorship and the Rise of Self-Censorship after the 2016 Failed Turkish Coup,” 7th USENIX Workshop on Free and Open Communications on the Internet, Proceedings, 2017
- “The Dynamics of Social Media Censorship in Transitioning Democracies,” Proceedings of the Annual Meeting of the American Political Science Association, Philadelphia, 2016
- “Known Unknowns: An Analysis of Twitter Censorship in Turkey,” Proceedings of the 14th ACM Workshop on Privacy in the Electronic Society, 2015

### **PRESENTATIONS**

- “Hunting Malicious Bots on Twitter: An Unsupervised Approach,” Presented at Twitter Data Science Tech Talk, December 2017
- “Hunting Bots on Twitter: An Unsupervised Approach,” Poster presentation at Rice Data Science Conference, October 2017
- “Analysis of Tweets and Tweeters during the 2014 Umbrella Revolution,” Poster presentation at Rice Undergraduate Research Symposium, April 2016

### **HONORS**

- Rice University Honor: Distinction in Research and Creative Works May 2017
- A university honor granted annually at commencement. Three CS students received this distinction in 2017.
  - Recommended by Computer Science Department for creativity, self-initiation, independence, perseverance, and dedication.
- 2nd Place in the School of Engineering at Rice Undergraduate Research Symposium April 2017
- President’s Honor Roll Fall 2014, Fall 2015

### **ACTIVITIES**

- President of Rice Road Runners July 2014 - September 2016
- Organized weekly group run of 10 students
  - Collaborated with other clubs to promote students’ health and well-being
- Certified Personal Trainer, National Council on Strength and Fitness (NCSF) 2017 - Present
- Marathon Runner Beijing 2012, Yosemite 2016, Houston 2014, 2016, 2017 - Present