Chen Zhang

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Education

M.S. in Computer Science, *New York University, Courant Institute of Mathematical Science*, New York, NY
GPA: 3.90/4.00 May 2018

B.S. in Electronic and Information Science and Technology, *Fudan University*, Shanghai, China
GPA: 3.48/4.00 Ranking: 18/100 June 2016

Work Experience

Software Engineer, Tools and Infrastructure Intern June - August, 2017
Google Inc. *Los Angeles, CA*

- Implemented a Python API and code behind to inspect various production monitoring signals and detect anomalies
- Productionized an internal tool that automates the optimization of anomaly detection on a YouTube Ads production monitoring system
- Collaborated with internal clients to improve the end-to-end user experience

Publications

- ***C. Zhang***, Y. Xu, Y. Zhou, X. Fu. On the "Familiar Stranger" Phenomenon in a Large-scale VoD System. In *Proceedings of IEEE Infocom Workshop NetSciCom' 2017* (2017)
- A. Wang, ***C. Zhang***, Y. Xu. A First View on Mobile Video Popularity as Time Series. In *Proceedings of ACM MobiHoc Workshop HotPOST'16* (2016) , Best Paper Runner-Up

Academic Experience

API for General-Purpose Graph-Based Searching (Python) 2018 Spring
Aritifitial Intelligence, New York University, New York, NY
https://github.com/zhangcshcn/Generic-Iterative-Deepening

- Implemented API for BFS, DFS, Iterative Deepening, and the hybird search method.
- Generalized the API by defining Searchable and State as superclasses.

Course Project - Scalable, Fault-Tolerant Distributed Key-Value Storage System (Golang) 2017 Fall
Distributed Systems, New York University, New York, NY

- Built a robust and linearizable distributed log replication system based on Raft
- Implemented a linearizable, robust, and memory efficient distributed k/v storage system on top of the self-built Raft log replication system
- Sharded the k/v storage system for scalability
- Developed a set of interface for easy load-balancing

Course Project - Sudoku Solver Using GPU Parallel Computing (Cuda) 2017 Fall
GPU, New York University, New York, NY
https://github.com/zhangcshcn/SudokuSolver

- Developed a parallelized stochastic solution to Sudoku for NVIDIA GPUs

Course Project - WikiNet: Wikipedia as a Network (Python, django) 2017 Spring
Web Search Engines, New York University, New York, NY
https://github.com/zhangcshcn/wse-wikiNet

- Built a heuristic crawler to download connected Wikipedia pages that are semantically highly related
- Created a topology-based algorithm to find the most semantically related paths between Wikipedia pages
- Developed a front-end interface and deployed onto school server

Course Project - Part-of-Speech Tagging using HMM (Python) 2017 Spring
Natural Language Processing, New York University, New York, NY
https://github.com/zhangcshcn/hmm_POStagger

- Combined 1st- and 2nd-order Markov model and implemented Viterbi decoding
- Used Hapax Legomena with Open Class as well as suffix and morphological features to handle unknown words
- Ranked No. 1 in accuracy among the class

Research Assistant - MediaNET 2015-2016
Fudan University, Shanghai, China, supervised by Dr. Yuedong Xu

- Worked on video popularity studies, user behavior analysis, time series analysis
- Published two research papers at IEEE and ACM workshops, one of which won the Best Paper Runner-Up award

Computer Skills

Languages:	Python, C/C++, Go, Java, MATLAB, Assembly
Platforms:	Linux, Windows, Microcontrollers, FPGA
Also Skilled In:	Cuda, DevOps, Web, PyTorch, Computer Vision, NLP, Machine learning