

Update on Aug. 25th

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## **EDUCATION**

**School of Cyber Security, Shanghai Jiao Tong University**

**Sep. 2015 - Present**

Overall GPA: 89.3/100 (3.83/4.3), Major GPA: 89.1/100 (3.81/4.3) Ranked: 9/101

Core Courses: ● Mathematical Analysis (96, Top 1%), ● Linear Algebra (95, Top 5%), ● Probability and Statistics (98, Top 1%), ● C++ Programming (91), ● Computer Organization and Architecture (92), ● Principle of Database (94, Top 5%), ● Mathematical Foundation of Information Security (96), ● Principle of Compiling, ● Data Structure and Algorithm (94, Top 5%), ● Principle and Technology of Computer Communication Network, ● Physics (99, Top 2%), ● Digital Signal Processing (93, top 5%), ● Signal and System (96, Top 1%), ● Analog Electronics Technique (97, Top 1%)

## **RESEARCH EXPERIENCES**

**Topic 1: Social Network Analysis – Topic Popularity Prediction** | SJTU & Tencent

**July 2017 - Jan. 2018**

Advisor: Xiaofeng Gao, Associate Professor at Department of Computer Science and Engineering, SJTU

Co-advisor: Peng He, Senior Researcher of WeChat Business Division Data Center, Tencent Inc.

- Reviewed 60+ papers in topic popularity prediction and made a list of indexes including records for each paper
- Cooperatively proposed a novel Bayesian model incorporated with fuzzy membership and adopted EM algorithm to estimate the parameters
- Kept close connection with staff from Tencent on detailed data requirements, and extracted 23 features from millions of WeChat retweeting records and user profile information
- Conducted extensive experiments on Twitter, Weibo and WeChat comparing with six strong baselines, and achieved improvement of mean absolute percent error (MAPE) by 13.10%

**Topic 2: Social Network Analysis – Cascade Burst Detection** | Shanghai Jiao Tong University

**Dec. 2017 - Present**

Advisor: Xiaofeng Gao, Associate Professor at Department of Computer Science and Engineering, SJTU

- Explored and crawled data from Twitter, Weibo with API and filtered data sets for future use of our laboratory research
- Proposed a novel survival model combining the survival boundary (obtained by two Gaussian distributions) and hazard ceiling to characterize the diffusion of cascades
- Employed three useful features to capture both the dynamic and static characteristics of cascades
- Conducted extensive experiments on Twitter and Weibo, achieved a relative high recall and early detection time

**Topic 3: Data Mining – UserCredibility** | University of Illinois at Urbana-Champaign

**July, 2018 - Present**

Advisor: Hari Sundaram, Associate Professor at Department of Computer Science and Department of Advertising, UIUC

Partner: Kanika Narang & Adit Krishnan, PhD student at Department of Computer Science, UIUC

- Conducted data extraction and feature (total 35) preprocessing on 10+ dataset dumps from Stackexchange platform
- Reviewed 40+ papers in Community Question Answering and graph convolutional neural networks from top conf.
- Did extensive data analysis, model design, and experiment verification with the help of my advisor and partners
- Met with advisor daily or weekly, brain storming, discussed and debugged the error and results of the experiments

## **PUBLICATIONS**

- **Chaoqi Yang**, Qitian Wu, Xiaofeng Gao, Guihai Chen, “EPOC: Detecting Early Pattern of Outbreak Cascades in Social Networks”. *International Conference on Database and Expert Systems Applications (DEXA)*, 2018
- Qitian Wu, **Chaoqi Yang**, Hengrui Zhang, Xiaofeng Gao, Paul Weng, Guihai Chen, “Adversarial Training Model Unifying Feature Driven and Point Process Perspectives for Event Popularity Prediction”. *International Conference on Information and Knowledge Management (CIKM)*, 2018
- Qitian Wu, **Chaoqi Yang**, Xiaofeng Gao, Peng He, Guihai Chen, “EPAB: Early Pattern Aware Bayesian Model for Social Content Popularity Prediction”. *IEEE International Conference on Data Mining (ICDM)*, 2018

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## SELECTED PROJECTS (codes and fancy demos are available in my GitHub <https://github.com/vcq091044>)

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### Project 1: Wireless Remote Control & Web Design | Shanghai Jiao Tong University Sep. 2016 – Feb. 2017

Advisor: Shiwen Zhang, Senior Engineer at School of Electronic Information & Electrical Engineering, SJTU

- Implemented an Android App using bluetooth in Android Studio to control a small mechanical car wirelessly
- Realized four control modes with five slide pages: direction button, voice (iFly Specch API), gesture shift, gravity sensor (3D Gyroscope), and realized video transmission
- Created a website with a series of html files on a cloud server to represent my work
- Got an A in this project and win an honor to show it in the hallway

### Project 2: Design of Image Retrieval Interactive System | Shanghai Jiao Tong University July 2017 – Sep. 2017

Advisor: Liqing Zhang, Professor and Vice Dean at School of Electronic Information & Electrical Engineering, SJTU

Partner: ZhenZhong Zhou, PhD Student at Department of Computer Science and Engineering, SJTU

- Cooperatively implemented a clothing recommendation system: an android application & a fancy web application
- Constructed a PHP cloud server and crawled millions of pictures of clothes from Taobao and Tmall
- Help to label the pictures using Faster-RCNN, used Google Chrome Console and Socket to connect
- Been highly praised by advisor and got strong comments on my ability to code and execute

### Project 3: Design of Online Chatroom Based on WeChat | Shanghai Jiao Tong University Sep. 2017 – Dec. 2017

Advisor: Xinghao Jiang, Professor and Vice Dean at School of Cyber Security, SJTU

- Finished complicated configuration and set up a local server with XAMPP and MySQL
- Imported all emojis from WeChat, implemented a software client with PyQt4 and Python Socket
- Implemented a web client like WeChat Moment with Flask and Bootstrap
- Got full marks in this project

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## AWARDS & HONORS

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- B-rate Outstanding Scholarship in Shanghai Jiao Tong University, 2016 & 2017
- Kwang-Hua Scholarship (Top 3 in department), 2016; Huawei scholarship (Top 5 in department), 2017
- Meritorious Winner Prize (Top 10%), Mathematics Contest in Modeling (MCM), 2018
- Provincial 2<sup>nd</sup> Prize, China Undergraduate Mathematical Contest in Modeling (CUMCM), 2017
- Provincial 2<sup>nd</sup> Prize, The Chinese Mathematics Competitions (CMC), 2016
- Provincial 3<sup>rd</sup> Prize, China Undergraduate Physics Competition, 2016
- Eastern Division 3<sup>rd</sup> Prize, Shing-Tung Yau High School Mathematics Awards, 2015
- National 1<sup>st</sup> Prize, Chinese Mathematical Olympiad in Senior, 2014

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## LEADERSHIP & ACTIVITIES

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### Summer Camp of Science | Shanghai Jiao Tong University | Activity Leader & Reporter July 2016

- Led a group of high school students to visit JIANGNAN SHIPYARD, finished a total of 20 pieces of report

### YIYOU (the most influential student publication on the campus) | SJTU | Chief Editor Mar. 2016 - Feb. 2017

- Edited and typeset 15 WeChat articles concerning school life and got a lot of comments and readings

### Class Committee | Shanghai Jiao Tong University | League Branch Secretary Sep. 2017 – Present

- Worked as the League branch secretary of the Class 3, School of Electronic Information & Electrical Engineering

### Volunteer Practice | Shanghai Nov. 2016 & Feb. 2017 & April 2017

- Prepare, stored, transported, and allocated clothes for runners in 2016 Shanghai International Marathon (2 days)
- Helped and guided migrant workers during the Spring Festival travel rush in South Shanghai Railway Station (1 day)
- Maintained order and kept the environment clean in 2017 Shanghai International Half Marathon (1 day)

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## SKILLS & INTERESTS

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Techniques: C/C++, Matlab, Python, R, HTML, Pascal, Latex (especially expertise in Matlab, Python and Latex)

Languages: TOFEL 94 (R:27, L:27, S:20, W:20)

Interests: Orienteering, Badminton, Table Tennis, Swim, Travel, Music