Yuan Yuan

Education

2012-2016

B.Eng. in Computer Science, Tsinghua University, Beijing, P.R. China.

GPA: 93/100 (3.9/4.0) Rank: 1/116

Selected courses: Data Structures and Algorithms, Fundamentals of Programming, Computer Organization, Operating System, Software Engineering, Machine Learning, Information Retrieval

2013-2016

B.Ec. in Economics, Tsinghua University, Beijing, P.R. China.

Selected courses: Intermediate Microeconomics (Game Theory included), Econometrics, Intermediate Macroeconomics, Principles of Finance

Research Interests

My research interest focuses primarily on data mining, especially its combination with economics, linguistics and social sciences. Meanwhile, I am interested in machine learning, natural language processing and information retrieval.

Research Experience

Jul-Nov 2015

Big Data and Social Computing Lab, University of Illinois at Chicago, IL, USA.

Advisor: Prof. Philip S. Yu

- Research Assistant: Opinion Spam Detection on Location-Based Social Network
 - Showed signals aggregated from multiple review websites can provide effective and human-interpretable evidences than those from any single website
 - Exploited multiple review websites and proposed a bi-level pipeline, macroscopic to microscopic, for opinion spam detection
 - Designed time series patterns to detect suspicious time period and conducted experiments to demonstrate such suspicion
 - Summitted to International World Wide Web Conference (WWW'16) as first author

Nov 2014-present

Knowledge Engineering Group, Tsinghua University, Beijing, China.

Advisor: Prof. Jie Tang

- Research Assistant: Quality Analysis and Predication Official Accounts on Wechat
 - Predict popularity (number of followers) and impact (quality) of a new official account
 - Built a classifier with features of articles, account behaviors and social networks
- Research Assistant: Expert finding on Arnet Miner: An Academic Search Engine
 - Utilized word embedding to produce similar queries to extend the initial queries to increase recall
 - Built heterogeneous networks of queries, papers, authors and conferences

Jun-Jul 20**1**5

Institute of HCI and Media Integration, Tsinghua University, Beijing, China.

Advisor: Prof. Jia Jia

- Professinal Training: Psychological Stress Detection on Social Media
 - Proposed features related to psychological stress from text (word embedding) and photos (image sentimental analysis)
 - Utilized social role of users to improve the model by clustering algorithm
 - Considered social relationship to predict status of inactive users

Sep-Dec_2014

National Engineering Laboratory of Next-Generation Internet and Interconnecting Equipment, Tsinghua University, Beijing, China.

Advisor: Prof. Youjian Zhao

- Challenge Project: Chinese Chat platform on FPGA
 - Only group that connects two FPGA platforms through serial communication
 - Proposed a simple typewriting to support chatting in Chinese
 - Awarded as the best project among all groups

May-Aug 2014

Information Retrieval Group, Tsinghua University, Beijing, China.

Advisor: Prof. Min Zhang

- Research Assistant: Long Tail Query on Search Engine
 - Utilized random walk on heterogeneous networks of queries and documents
 - Improved the efficiency of random walk in terms of data structures

Publications

[1] Yuan Yuan, Sihong Xie, Chun-ta Lu, Jie Tang and Philip S. Yu

An Opinion Spam Detection Framework using Multi-site Temporal Sentimental Patterns

WWW 2016: Submitted to 25th International Conference on World Wide Web

Selected Academic Honors & Awards

2015

CCF Outstanding Undergraduate Award.

- Only two students at Tsinghua University and approxiamately 100 in China receive this award each year
- Offered by China Computer Federation (CCF)

2014

National Scholarship of China.

- Only three students from Dept. Computer Science at Tsinghua University are awarded each year
- It is the top scholarship provided by Chinese government (Ministry of Education of P.R. China)

Singapore Technology Engineering Overseas Scholarship.

- Only six students at Tsinghua University received this award
- Offered by Singapore Technologies Engineering Ltd

Professional Skills

Programming Proficient in C/C++, Java and Python. Capable of Matlab, Scala, VHDL/verilog, JavaScript, HTML/CSS, STATA and LATEX. Github: http://github.com/yuany12

English Fluent in English Reading, Writing and Speaking



Services

Reviewer of TKDD, Transactions on Knowledge Discovery from Data, Oct. 2015.

Aug 2013-Jan 2014 E-love Social Practice, Team Leader.

- Collected spare computers and established computer classrooms for schools of children of migrant workers, who had hardly used computers before
- Won Brand Practice Team Prize of Tsinghua University (top 10)

Jul-Aug 2013

Summer Service and Learning Program in Rural China, Team Leader.

Volunteered to teach over 400 secondary students in rural China, with ten undergraduates from mainland China, Hong Kong and USA