Liuzixuan (Peter) Lin

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EDUCATION

The University of Chicago, Chicago, U.S.A   09/2019 - now
Ph.D. Student in Computer Science (Areas: Data Analytics, Systems)
Advisor: Prof. Andrew A. Chien

Peking University, Beijing, China   09/2015 - 07/2019
Bachelor of Science in Computer Science and Technology
Undergraduate Thesis: The implementation of a knowledge graph-based urban geo-semantics mining system (in Chinese, Outstanding Undergraduate Thesis, EECS, Peking University)

Double Major in Economics

RESEARCH EXPERIENCE

Zero-carbon Cloud (2019.10 - now)
Advisor: Andrew A. Chien (Professor, the University of Chicago)

- Exploring the opportunities of exploiting "stranded power" in power grids.
- Surveyed available data from different sources including MISO and EIA. Analyzing the data for specific prediction and optimization tasks.

Inferring Urban Regions' Functions Based on Social Media Text Analysis (2018.2 - 2018.11)
Advisor: Yanchun Sun (Associate Professor, Peking University)

- Extracted information from microblogs to infer the topics in a region (e.g., food, travel) with NLP methods.
- Integrated sentiment information (e.g., ratio of positive microblogs) to the topics with a LSTM classifier.
- Participated in a related case study of Beijing and the result analysis.

Extracting Referenced Datasets from Social Science Papers (2018.7 - 2018.9)
Advisor: Ian Foster / Kyle Chard (Professor / Fellow, the University of Chicago)

- Summarized the development of named entity recognition (NER) methods.
- Accelerated data preprocessing by a Python program, which reduced manual labeling and improved the accuracy.
- Designed and implemented a model based on bidirectional LSTM with CNN and CRF layers, which reads the raw text of social science papers and outputs dataset candidates with the sentences where they appear.

TEACHING

TA for Software Engineering   2019 Spring
School of Electronics Engineering and Computer Science, Peking University

SELECTED AWARDS

Excellent Graduate, Peking University	05/2019
Yang Fuqing & Wang Yangyuan Academician Scholarship, Peking University	11/2018
Merit Student, Peking University	11/2018
Honorable Mention, The Mathematical Contest in Modeling 2018	03/2018

SELECTED COURSE PROJECTS

Labs on Computer Organization and Architecture
- Built a benchmark to test the comprehensive performance of a computer.
- Independently completed 10K lines of code on projects including a RISC-V simulator, a cache simulator and an image processing program with SIMD instruction sets.

Mobile Application Development in Software Engineering and relevant practice course
- Applied methodology of Software Engineering to the project, from demand analysis to software testing.
- As the group leader, coordinated the work of front end and back end in addition to my own development work.
- Developed two Android applications respectively about identifying events on campus and sharing comments on cafeterias.

SKILLS

Programming Skills: C/C++, Python, Java for Android, x86 Assembly, parallel methods (OpenMP, OpenCL, MPI), data

visualization (D3.js)
Standard English Tests: TOEFL: Total 107 (Reading 29 Listening 27 Speaking 22 Writing 29)
            GRE: Verbal 155 Quantitive 170 Analytical Writing 3.5

EXTRACURRICULAR ACTIVITIES

Member of the Debate Team, School of EECS   09/2015-Present
Organization of activities for fresh students in the School of EECS   09/2016-06/2018
Volunteer of Peking University's anniversary and sports meeting   04/2016-05/2016