# Liuzixuan (Peter) Lin

Rm 381, John Crerar Library, University of Chicago, Chicago, IL, 60637, U.S. | (+1)3129348807 | lzixuan@uchicago.edu

#### **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

#### **PUBLICATIONS**

<u>Liuzixuan Lin</u> and Andrew A. Chien. 2020. Automated Classification of Power Plants by Generation Type. In Proceedings of the Eleventh ACM International Conference on Future Energy Systems (e-Energy '20).

#### 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

Crerar Fellowship, the University of Chicago	09/2019
Excellent Graduate, Peking University	05/2019
Yang Fuqing & Wang Yangyuan Academician Scholarship, Peking University	11/2018
Merit Student, Peking University	11/2018

### **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