

# WANDA LI

Email: wdl10@outlook.com ◊ Homepage: <https://wandli.github.io/>

## EDUCATION

---

**Tsinghua-Berkeley Shenzhen Institute**

*Master student in Data Science and Information Technology*

Shenzhen, China

Sep 2020 - Present

**Fudan University**

*B.S. in Computer Science (with honors)*

Shanghai, China

Sep 2016 - Jun 2020

## PUBLICATIONS

---

1. Anping Zhang\*, Ke Zhang\*, **Wanda Li**, Yue Wang, Yang Li, Lin Zhang. “Optimising Self-Organised Volunteer Efforts in Response to the COVID-19 Pandemic.” *Humanities and Social Sciences Communications*, 2022.
2. **Wanda Li**, Zhiwei Xu, Yi Sun, Qingyuan Gong, Yang Chen, Aaron Yi Ding, Xin Wang, Pan Hui. “DeepPick: A Deep Learning Approach to Unveil Outstanding Users with Public Attainable Features.” *Transactions on Knowledge and Data Engineering (TKDE)*, 2021.
3. **Wanda Li**, Jianping Zeng. “Leet Usage and Its Effect on Password Security.” *IEEE Transactions on Information Forensics and Security (TIFS)*, 2021.
4. Yuxuan Xiu, **Wanda Li**, Wai Kin Victor Chan. “OD-HyperNet: A Data-Driven Hyper-Network Model for Origin-Destination Matrices Completion Using Partially Observed Data.” *Proceedings of the 10th International Conference on Logistics, Informatics and Service Sciences (LISS '20)*.

## SELECTED AWARDS

---

**2022** Ranked top 4% of Shopee Code League 2022 (Top 106 among 2,393 teams)

**2020** The First Prize of Shanghai Open Data Application (SODA) Competition (Top 3 among 198 teams)

**2020** Outstanding Graduate of Fudan University

**2020** Chun-Tsung Scholar (Research Program Funded by Nobel Laureate Dr. Tsung-Dao Lee)

**2019 & 2018** Second Class Scholarship for Outstanding Students in Fudan University (Top 10%)

**2018** National Second Prize, China Undergraduate Mathematical Contest in Modeling

**2017** The Most Popular Team, Google Girl Hackthon Season III

## TEACHING AND SERVICE

---

**Teaching Assistant: Learning from Data**

*Tsinghua University*

Fall 2022

## RESEARCH EXPERIENCE

---

**Stage-Adaptive Multi-Task Recommendation System**

*Advisor: Prof. Suhang Wang*

Penn State University

Jun. 2022 - Aug. 2022

- Proposed a user stage adaptive recommendation system, STAN, the first multi-task recommendation method that takes user lifecycle into consideration.
- Experimental results showed that our system can achieve up to 10.85%/18.47% improvement on AUC/NDCG score, respectively.

**Human Self-Organization Modeling**

*Advisor: Prof. Yang Li*

Tsinghua University

Sep. 2020 - Dec. 2020

- Designed an entropy-based people self-organization level measurement algorithm.
- Analyzed user behavior data all-year around by incorporating deep learning algorithm with Hirschfeld-Gebelein-Rényi (HGR) maximal correlation methods.

**Estimation of Population Movement between Cities**

*Advisor: Prof. Wai Kin Victor Chan*

Tsinghua University

Dec. 2019 - Feb. 2020

- Proposed hyper-network origin-destination matrices algorithm to model population fluctuation during COVID-19.
- Integrated the partially observed travelling data with optimizing methods to build an efficient and precise model.

#### **Unveil Outstanding Users with Limited Features**

*Advisor: Prof. Yang Chen*

Fudan University  
Sep. 2018 - May. 2019

- Proposed a framework, DeepPick, to detect outstanding users in online social network without the full information of network structure.
- Experimental results demonstrated that our framework achieves up to 35.3% F1-score and 22.5% AUC compared to existing approaches.

#### **Usage and Effect of Leet Words in Password**

*Advisor: Prof. Jianping Zeng*

Fudan University  
Sep. 2017 - Apr. 2018

- Designed methods to explain the Leets in passwords by the definition, detection, dictionary construction, and usage.
- Unveiled the effect of Leet transformations in password security: common Leets can enhance password cracking performance, while low-frequency Leets could help users to strengthen their passwords.

### **INDUSTRIAL EXPERIENCE**

---

#### **Alibaba Group.**

*Recommendation System Research Intern.*

Beijing, China  
Jul. 2021 - Dec. 2021

- Designed and implemented a multimodal representation model to enhance the item embedding in recommendation system.

#### **Kuaishou Technology.**

*Machine Learning Engineer Intern.*

Shenzhen, China  
Apr. 2021 - Jun. 2021

- Designed and implemented machine learning models to detect impostors and malicious users on the Kuaishou Application.

#### **Microsoft.**

*Customer Service and Support(CSS) Security Intern.*

Shanghai, China  
Jan. 2019 - Mar. 2019

- Built a highly reusable power BI internal analysis project and set up different test environments to accomplish lab works.

### **SKILLS**

---

**Programming:** Python(Proficient), C/C++(Proficient), Matlab(Basic), SQL(Basic), Hive(Basic), Java(Basic), NetLogo(Basic).

**Standard Language Tests:** TOEFL 105