Li Zhang 张力

Fourth-year Ph.D. Student (Expected to graduate in Sep. 2025)
Beijing University of Posts and Telecommunications (BUPT), Beijing, China
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Current Research

- **Empirical Study and System Optimization for Edge/Mobile Computing**
  1. [C.2 USENIX ATC'24, C.5 IEEE/ACM SEC'22] Mobile SoC Clusters
  2. [C.3 USENIX ATC'24] Mobile Cloud Gaming on Edge-cloud SoC Clusters
  3. [C.6 IMC'21] The First Edge Cloud Measurement
- **On-device Mobile GUI Agents**
  1. [C.1 UIST'24] Mobile GUI Agent Benchmark & Testbed: LlamaTouch
  2. [P.1 arXiv'24] Mobile GUI Dataset: MobileViews

Education & Experience

2021-Present **Ph.D. in Computer Science**
School of Computer Science,
Beijing University of Posts and Telecommunications, Beijing, China.
Advisor: Prof. Mengwei Xu

08/2020-12/2020 **Research Intern**
Edge Computing Group, Alibaba Cloud, Beijing, China.
Project: Edge cloud measurement and characterization
Mentor: Dr. Zhe Fu

2019-2021 **MSc in Computer Science**
School of Computer Science,
Beijing University of Posts and Telecommunications, Beijing, China.
Advisor: Prof. Shangguang Wang

2015-2019 **BSc in Computer Science**
College of Computer Science,
Sichuan University, Chengdu, China.

Publications (*=co-primary)

Full Conference Publications

2024 [C.1] **[UIST'24] LlamaTouch: A Faithful and Scalable Testbed for Mobile UI Task Automation**

***Li Zhang**, Shihe Wang, Xianqing Jia, Zhihan Zheng, Yunhe Yan, Longxi Gao, Yuanchun Li, Mengwei Xu*

ACM Symposium on User Interface Software and Technology (UIST'24)

Acceptance rate: 24.0% (146/608).

2024 [C.2] **[ATC'24] More is Different: Prototyping and Analyzing a New Form of Edge Server with Massive Mobile SoCs**

***Li Zhang,** Zhe Fu, Boqing Shi, Xiang Li, Rujin Lai, Chenyang Yang, Ao Zhou, Xiao Ma, Shangguang Wang, Mengwei Xu*

2024 USENIX Annual Technical Conference (ATC'24)

Acceptance rate: 15.8% (77/488).

2024 [C.3] **[ATC'24] High-density Mobile Cloud Gaming on Edge SoC Clusters**

***Li Zhang,** Shangguang Wang, Mengwei Xu*

2024 USENIX Annual Technical Conference (ATC'24)

Acceptance rate: 15.8% (77/488).

2024 [C.4] **[ASPLOS'24] SoCFlow: Efficient and Scalable DNN Training on SoC-Clustered Edge Servers**

Daliang Xu, Mengwei Xu*, Chiheng Lou, **Li Zhang**, Gang Huang, Xin Jin, Xuanzhe Liu*

The 29th ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS'24)

Acceptance rate: 16.2% (28/173, spring cycle).

2022 [C.5] **[IEEE/ACM SEC'22] Position Paper: Renovating Edge Servers with ARM SoCs**

Mengwei Xu, ***Li Zhang**, Shangguang Wang*

2022 IEEE/ACM 7th Symposium on Edge Computing (SEC'22)

2021 [C.6] **[IMC'21] From Cloud to Edge: A First Look at Public Edge Platforms**

*Mengwei Xu, Zhe Fu, Xiao Ma, **Li Zhang,** Yanan Li, Feng Qian, Shangguang Wang, Ke Li, Jingyu Yang, Xuanzhe Liu*

ACM Internet Measurement Conference (IMC'21)

Acceptance rate = 28.1% (55/196).

Journal Publications

2024 [J.1] **[TMC'24] Efficient, Scalable, and Sustainable DNN Training on SoC-**

Clustered Edge Servers

*Mengwei Xu, Daliang Xu, Chiheng Lou, **Li Zhang**, Gang Huang, Xin Jin, Xuanzhe Liu*

IEEE Transactions on Mobile Computing.

WORKSHOP, DEMO, POSTER

2024 [W.1] **[MobiSys'24] Poster: Efficient and Accurate Mobile Task Automation through Learning from Code**

*Shihe Wang, **Li Zhang**, Mengwei Xu*

ACM International Conference on Mobile Systems, Applications, and Services (Mobisys'24)

PRE-PRINTS

2024 [P.1] **MobileViews: A Large-Scale Mobile GUI Dataset**

Longxi Gao, **Li Zhang***, Shihe Wang, Shangguang Wang, Yuanchun Li, Mengwei Xu*

2024 [P.2] **A First Look at GPT Apps: Landscape and Vulnerability**

Zejun Zhang, **Li Zhang***, Xin Yuan, Anlan Zhang, Mengwei Xu, Feng Qian*

2024 [P.3] **DroidCall: A Dataset for LLM-powered Android Intent Invocation**

*Weikai Xie, **Li Zhang**, Shihe Wang, Rongjie Yi, Mengwei Xu*

2022 [P.4] **Device-centric Federated Analytics At Ease**

***Li Zhang**, Junji Qiu, Shangguang Wang, Mengwei Xu*

Honors & Awards

- ❑ National Scholarship, Ministry of Education, China, 2024
- ❑ Student Travel Grant: ACM/IEEE SEC 2022, ACM MobiSys 2024