

Anlan Zhang

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EDUCATION

- University of Southern California**, Los Angeles, CA Aug. 2023 – Present
Ph.D. Candidate in Computer Engineering
Advisor: Prof. Feng Qian
Research Interest: Intelligent Mobile, Multimedia, and Networked Systems
- University of Minnesota – Twin Cities**, Minneapolis, MN Aug. 2019 – Jul. 2023
Ph.D. Candidate in Computer Science
Transferred to University of Southern California
- Beihang University**, Beijing, China Sept. 2015 – Jun. 2019
B.E. in Computer Science and Technology
GPA: 3.77 / 4.0, Ranking: 20 / 214

EXPERIENCE

- Research Scientist/Engineer Intern @ Adobe Research**, San Jose, CA May 2023 – Jul. 2023
Mentor: Dr. Stefano Petrangeli
 - Designed a streaming-friendly FLIF-based lossless compression algorithm for image live co-editing.
 - Proposed a fast meta-adaptive context modeling approach for image live co-editing data.
 - Analyzed the latency and compression ratio trade-offs of the above approaches.
- Software Engineer Intern @ RP Core - Video, Meta**, Seattle, WA May 2022 – Aug. 2022
Intern Manager: Dr. Chia-Yang Tsai
 - Developed pre- and post- processing algorithms to improve the efficiency of depth map stream compression.
 - Located and fixed bugs in the depth map compression codebase, and refined the internal design documentation.
- Research Intern @ SyMLab, HKUST**, HK, China Jul. 2018 – Jan. 2019
Supervisor: Prof. Pan Hui and Prof. Tristan Braud
- Research Intern @ BUAA**, Beijing, China Mar. 2018 – Jul. 2018
Supervisor: Prof. Xianglong Liu and Prof. Aishan Liu

PUBLICATIONS

Conference Papers

- [MobiCom24] **MuV²: Scaling up Multi-user Mobile Volumetric Video Streaming via Content Hybridization and Sharing**
*Yu Liu, Puqi Zhou, Zejun Zhang, **Anlan Zhang**, Bo Han, Zhenhua Li, and Feng Qian*
To Appear In Proceedings of the 30th Annual International Conference on Mobile Computing and Networking, 2024
- [NSDI24] **Habitus: Boosting Mobile Immersive Content Delivery through Full-body Pose Tracking and Multi-path Networking**

Anlan Zhang, Chendong Wang, Yuming Hu, Ahmad Hassan, Zejun Zhang, Bo Han, Feng Qian, and Shichang Xu
To Appear In 21st USENIX Symposium on Networked Systems Design and Implementation (NSDI 24), 2024

[SIGCOMM22] Vivisecting Mobility Management in 5G Cellular Networks

Ahmad Hassan, Arvind Narayanan, **Anlan Zhang**, Wei Ye, Ruiyang Zhu, Shuwei Jin, Jason Carpenter, Z. Morley Mao, Feng Qian, and Zhi-Li Zhang
In Proceedings of the ACM SIGCOMM 2022 Conference, 2022

[NSDI22] YuZu: Neural-enhanced Volumetric Video Streaming

Anlan Zhang, Chendong Wang, Bo Han, and Feng Qian
In 19th USENIX Symposium on Networked Systems Design and Implementation (NSDI 22), 2022

[MobiCom21] EMP: Edge-assisted Multi-vehicle Perception

Xumiao Zhang, **Anlan Zhang**, Jiachen Sun, Xiao Zhu, Y. Ethan Guo, Feng Qian, and Z. Morley Mao
In Proceedings of the 27th Annual International Conference on Mobile Computing and Networking, 2021

[AAAI19] Perceptual-sensitive GAN for Generating Adversarial Patches

Aishan Liu, Xianglong Liu, Jiaxin Fan, Yuqing Ma, **Anlan Zhang**, Huiyuan Xie, and Dacheng Tao
In Proceedings of the AAAI Conference on Artificial Intelligence, 2019

Workshop

[HotMobile24] The Case for Boosting Mobile Application QoE via Smart Band Switching in 5G/xG Networks

Ahmad Hassan, Wei Ye, **Anlan Zhang**, Jason Carpenter, Ruiyang Zhu, Shuwei Jin, Feng Qian, Z. Morley Mao, and Zhi-Li Zhang
In Proceedings of the 25th International Workshop on Mobile Computing Systems and Applications, 2024

[HotMobile21] Efficient Volumetric Video Streaming through Super Resolution

Anlan Zhang, Chendong Wang, Bo Han, and Feng Qian
In Proceedings of the 22nd International Workshop on Mobile Computing Systems and Applications, 2021

[ICDEW19] Driving Big Data: A First Look at Driving Behavior via A Large-scale Private Car Dataset

Tong Li, Ahmad Albilal, **Anlan Zhang**, Mohammad A. Hoque, Dimitris Chatzopoulos, Zhu Xiao, Yong Li, and Pan Hui
In 2019 IEEE 35th International Conference on Data Engineering Workshops (ICDEW), 2019

Poster

[MobiSys20] Poster: Mobile Volumetric Video Streaming Enhanced by Super Resolution

Anlan Zhang, Chendong Wang, Xing Liu, Bo Han, and Feng Qian
In Proceedings of the 18th International Conference on Mobile Systems, Applications, and Services, 2020

Preprint

[Preprint24] A First Look at GPT Apps: Landscape and Vulnerability

Zejun Zhang, Li Zhang, Xin Yuan, **Anlan Zhang**, Mengwei Xu, and Feng Qian
arXiv preprint arXiv:2402.15105, 2024

HONORS AND AWARDS

2024 NSDI 2024 Grant

2022 ICNP 2022 Grant
2022 NSDI 2022 Grant
2022 MobiCom 2021 Grant
2019 Outstanding Undergraduate Thesis, Beihang University, **Top 10%**

TEACHING EXPERIENCE

University of Minnesota – Twin Cities

CSCI 4061: Introduction to Operating Systems, Fall 2022
Graduate Teaching Assistant, with Prof. Jon Weissman

ACADEMIC SERVICES

Conference Program Committee/Reviewer

ACM SIGCOMM Workshop on Emerging Multimedia Systems (EMS) 2024: Program Committee
USENIX ATC 2024: External Review Committee
ACM WWW 2023: Subreviewer

Conference Organizer

ACM IoT 2024: Publicity and Social Media Chair

Journal Reviewer

IEEE Internet of Things Journal
IEEE Transactions on Mobile Computing
ACM Computing Surveys
IEEE Network Magazine
Elsevier Journal of Network and Computer Applications

Shadow Program Committee

ACM EuroSys 2024
ACM EuroSys 2023

Artifact Evaluation Committee

USENIX FAST 2024
ACM SIGCOMM 2023
USENIX OSDI/ATC 2023
ACM EuroSys 2023

TECHNICAL SKILLS

Programming Languages: C, C++, Java, Python, TypeScript, Verilog, Assembly Language
Languages: English, Mandarin Chinese

April 15, 2024