

Pengyuan Zhou

Bio

I got my PhD from Department of Computer Science, University of Helsinki in 2020. After one year of PostDoc there, I joined USTC as a research associate professor in Sept. 2021. I have the fortune to work with numerous excellent researchers including the fellows from SymLab and CoNe Lab led by two inspiring professors, Prof. Pan Hui and Prof. Jussi Kangasharju, respectively. Currently I'm working on the interdisciplinary research of distributed learning, trustworthy AI, and metaverse.

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Selected Papers

- **Are You Left Out? An Efficient and Fair Federated Learning for Personalized Profiles on Wearable Devices of Inferior Networking Conditions.**
Pengyuan Zhou, Hengwei Xu, Lik-Hang Lee, Pei Fang, Pan Hui
ACM Ubicomp, 2022.
- **Augmented Informative Cooperative Perception**
Pengyuan Zhou, Pranvera Kortoci, Yui-Pan Yau, Tristan Braud, Xiujun Wang, Benjamin Finley, Lik-Hang Lee, Sasu Tarkoma, Jussi Kangasharju, Pan Hui
IEEE TITS, 2022.
- **Towards User-Centered Metrics for Trustworthy AI in Immersive Cyberspace**
Pengyuan Zhou, Benjamin Finley, Lik-Hang Lee, Yong Liao, Haiyong Xie, Pan Hui
Arxiv, 2022
- **All One Needs to Know about Metaverse: A Complete Survey on Technological Singularity, Virtual Ecosystem, and Research Agenda.**
Lik-Hang Lee, Tristan Braud, Pengyuan Zhou, Lin Wang, Dianlei Xu, Zijun Lin, Abhishek Kumar, Carlos Bermejo Fernandez, and Pan Hui.
Proceedings of the IEEE (Under Review), 66 pages.
- **DRLE: Decentralized Reinforcement Learning at the Edge for Traffic Light Control in the IoV**
Pengyuan Zhou, Xianfu Chen, Zhi Liu, Tristan Braud, Pan Hui, Jussi Kangasharju
IEEE TITS, 2021.
- **Edge-facilitated Augmented Vision in Vehicle-to-Everything Networks**
Pengyuan Zhou, Tristan Braud, Aleksandr Zavodovski, Zhi Liu, Xianfu Chen, Pan Hui, Jussi Kangasharju
IEEE TVT, 2020.
- **Multipath Computation Offloading for Mobile Augmented Reality**
Tristan Braud, Pengyuan Zhou, Jussi Kangasharju, Pan Hui
IEEE Percom, 2020 (acceptance rate 14.2%).
- **DeCloud: Truthful Decentralized Double Auction for Edge Clouds**
Aleksandr Zavodovski, Suzan Bayhan, Nitinder Mohan, Pengyuan Zhou, Walter Wong, Jussi Kangasharju
IEEE ICDCS, 2019.

Services

- **IJCAI'21, AAAI'22, DACS@ICDE'22, SocialMeta@ICDCS'22**
Program Committee
- **Metabuild@IEEE VR'22, CyberToMeta'22, EdgeHackathon'17**
Organizer