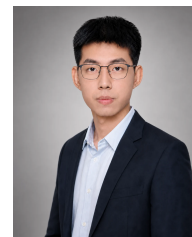


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Education and Employment

Present	Beijing University of Posts and Telecommunications , School of Artificial Intelligence
Jul. 2026	Assistant Professor Master's Supervisor
Jun. 2026 Feb. 2024	Tsinghua University , School of Software Postdoctoral Researcher Advisor: Prof. Zheng Yang
Jan. 2024 Aug. 2019	Tsinghua University , School of Software Ph.D. in Software Engineering, under the supervision of Prof. Zheng Yang Thesis: <i>Signal Processing and Generation Techniques for Wireless Sensing</i>
Jul. 2019 Sep. 2015	Beijing University of Posts and Telecommunications B.S. in Communication Engineering Thesis: <i>High-robustness Navigation Technology based on Mobile Vision</i>

Publications

- [ACM MobiCom] **Chi G**, Yang Z, Wu C, Xu J, Gao Y, Liu Y, Han TX. RF-Diffusion: Radio Signal Generation via Time-Frequency Diffusion[C]. Proceedings of the 30th Annual International Conference on Mobile Computing and Networking, 2024: 77–92.
- [ACM MobiSys] **Chi G**, Yang Z, Xu J, Wu C, Zhang J, Liang J, Liu Y. Wi-Drone: Wi-Fi-based 6-DoF Tracking for Indoor Drone Flight Control[C]. Proceedings of the 20th Annual International Conference on Mobile Systems, Applications and Services, 2022: 56–68.
- [IEEE JSAC] **Chi G**, Zhang G, Ding X, Ma Q, Yang Z, Du Z, Xiao H, Liu Z. XFall: Domain Adaptive Wi-Fi-Based Fall Detection With Cross-Modal Supervision[J]. IEEE Journal on Selected Areas in Communications, 2024, 42(9): 2457–2471.
- [IEEE TMC] **Chi G**, Xu J, Zhang J, Zhang Q, Ma Q, Yang Z. Locate, Tell, and Guide: Enabling Public Cameras to Navigate the Public[J]. IEEE Transactions on Mobile Computing, 2023, 22(2): 1010–1024.
- [ACM MobiSys] Xu J*, **Chi G*** (co-first), Yang Z, Li D, Zhang Q, Ma Q, Miao X. FollowUpAR: enabling follow-up effects in mobile AR applications[C]. Proceedings of the 19th Annual International Conference on Mobile Systems, Applications, and Services, 2021: 1–13.
- [IEEE GLOBECOM] Gao Y*, **Chi G*** (co-first), Zhang G, Yang Z. Wi-Prox: Proximity Estimation of Non-Directly Connected Devices via Sim2Real Transfer Learning[C]. GLOBECOM 2023 - 2023 IEEE Global Communications Conference, 2023: 5629–5634.
- [IEEE IoTJ] Gao Y, **Chi G** (corresponding), Yang Z, Cheng S, Wei Z. RF-Prox: Radio-Based Proximity Estimation of Non-Directly Connected Devices[J]. IEEE Internet of Things Journal, 2025, 12(7): 7874–7887.
- [IEEE MSN] Cheng S, Gao Y, Yang Z, **Chi G** (corresponding), Han TX. WiViD: Leveraging Wi-Fi and Vision for Depth Estimation via Multimodal Diffusion[C]. Proceedings of the 20th IEEE International Conference on Mobility, Sensing and Networking (MSN), 2024: 73–80.

- [ACM TOSN] Cheng S, Gao Y, Yang Z, **Chi G** [✉] (corresponding), Liu H, Han X. Multimodal Diffusion-Based Depth Estimation Framework with Wi-Fi and Vision[J]. ACM Transactions on Sensor Networks, 2026.
- [ACM IMWUT] Zhao L, Lyu R, Lei H, Lin Q, Zhou A, Ma H, Wang J, Meng X, Shao C, Tang Y, **Chi G**, Yang Z. AirECG: Contactless Electrocardiogram for Cardiac Disease Monitoring via mmWave Sensing and Cross-domain Diffusion Model[J]. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 2024, 8(3): 1–27.
- [ACM TOSN] Zhang G, **Chi G**, Zhang Y, Ding X, Yang Z. Push the Limit of Millimeter-wave Radar Localization[J]. ACM Transactions on Sensor Networks, 2023, 19(3).
- [ACM TOSN] Dong L, Xu J, **Chi G**, Li D, Zhang X, Li J, Ma Q, Yang Z. Enabling Surveillance Cameras to Navigate[J]. ACM Transactions on Sensor Networks, 2021, 17(4).
- [IEEE VTC] **Chi G**, Wang Y, Liu X, Qiu Y. Latency-Optimal Task Offloading for Mobile-Edge Computing System in 5G Heterogeneous Networks[C]. 2018 IEEE 87th Vehicular Technology Conference (VTC Spring), 2018: 1–5.
- [IEEE TCOM] Yang Z, **Chi G**, Wu C, Liu H, Gao Y, Liu Y, Eldar YC, Xu J, Han TX. Generative AI for Wireless Communication and Sensing: Toward Unified Foundation Models[J]. IEEE Transactions on Communications, 2026, 74: 10510–10539.
- [IEEE ICRA] Zhang Z, Li X, Zou S, **Chi G**, Li S, Qiu X, Wang G, Zheng G, Wang L, Zhao H, Zhao H. Chameleon: Fast-slow Neuro-symbolic Lane Topology Extraction[C]. Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), 2025: 3752–3758.
- [IEEE/RSJ IROS] Zhang Z, Qiu X, Zhang B, Zheng G, Gu X, **Chi G**, Gao HA, Wang L, Liu Z, Li X, Gilitschenski I, Li H, Zhao H, Zhao H. Delving into Mapping Uncertainty for Mapless Trajectory Prediction[C]. Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2025.
- [arXiv] Yang Z, Zhang Y, **Chi G**, Zhang G. Hands-on Wireless Sensing with Wi-Fi: A Tutorial[J]. arXiv preprint arXiv:2206.09532, 2022.
- [Chinese J. Computers] Zhang G, Yang Z, Zhang Y, **Chi G**, Ma Q, Miao X. Research on Long-Range Multi-Target Tracking Algorithm with Millimeter-Wave Device[J]. Chinese Journal of Computers, 2023, 46(7): 1366–1382.
- [IEEE ICCCN] Dong L, Xu J, **Chi G**, Li D, Zhang X, Li J, Ma Q, Yang Z. Enabling Surveillance Cameras to Navigate[C]. Proceedings of the 29th International Conference on Computer Communications and Networks (ICCCN), 2020: 1–10.

⌘ Project Experience

- **Wireless Sensing Technology for 6-DoF Pose Tracking** (*NSFC Young Scientists Fund (Category C); China Postdoctoral Science Foundation General Program; PI*)
 - Proposed the first wireless 6-DoF pose tracking system.
 - Built a factor-graph framework for multimodal wireless fusion.
 - Achieved 20 cm positioning accuracy and 3.8° rotational accuracy.
- **RF-oriented Diffusion Model for Wireless Sensing** (*NSFC General Project*)
 - Proposed time-frequency diffusion for radio signal generation.
 - Designed complex-valued neural operators for raw RF signals.
- **CSI Modeling based on Commercial Wireless Devices** (*NSFC Key Project*)
 - Developed an end-to-end theoretical model of CSI measurement errors.
 - Modeled carrier and sampling frequency offsets, time offsets, and nonlinear hardware errors.

📖 **Wi-Fi Based Fall Detection System** (*HUAWEI Collaborative Project*)

- Led the design of a domain-generalizable Wi-Fi fall detection system with cross-modal supervision.
- Achieved over 97% overall accuracy and approximately 96% cross-domain accuracy; supports integration into Huawei AX3 Pro routers.

📖 **Wi-Fi-based Intrusion Detection System** (*ZTE Collaborative Project*)

- Led the design of a lightweight intrusion detection framework for low-power devices.
- Achieved over 99% detection rate and latency below 20 ms; supports integration into ZTE E1600 routers.

🏆 Awards and Honors

- 2026 📖 **CCF Natural Science Award, First Prize**, China Computer Federation
- 2024 📖 **Doctoral Dissertation Award**, ACM SIGCOMM China
- 2024 📖 **Best Artifact Award**, ACM MobiCom 2024
- 2021 - 2023 📖 **First-class Scholarship**, Tsinghua University
- 2019 📖 **Special Scholarship for Undergraduates**, Beijing University of Posts and Telecommunications
- 2016 - 2018 📖 **National Scholarship**, Ministry of Education, China

👤 Professional Services

Conference Chairing

- 📖 Forum Chair, CNCC 2026: “Wireless Short-Range Networks in the AI Era: Evolution or Reinvention?” (October 23, 2026).
- 📖 Session Chair, HMCC 2026 & HHME 2026 (August 2026).

Program Committees

- 📖 IEEE GLOBECOM, IEEE PIMRC, IEEE ICC (2026).
- 📖 IEEE GLOBECOM, IEEE ICPADS (2025).
- 📖 ACM MobiCom Artifact Evaluation Committee (2024).

Reviewing

- 📖 ACM Transactions on Internet of Things (TIOT), Distinguished Reviewer.
- 📖 ACM IMWUT/UbiComp, ACM TOSN; IEEE JSAC, TMC, TWC, TCOM, TDSC, TII.

Teaching Assistant

- 📖 The Frontiers of Computer Networking, Tsinghua University (Spring 2020, Spring 2021).
- 📖 Data Structure, Tsinghua University (Fall 2021).