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* 为共同第一作者

1. **Boyuan Yang**, Ruirong Chen, Kai Huang, Jun Yang, and Wei Gao. “Eavesdropping user credentials via GPU side channels on smartphones.” In *Proceedings of the 27th ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, pp. 285-299, 2022.
2. **Boyuan Yang***, Xingzhe Song*, Ge Yang, Ruirong Chen, Erick Forno, Wei Chen, and Wei Gao. “SpiroSonic: monitoring human lung function via acoustic sensing on commodity smartphones.” In *Proceedings of the 26th Annual International Conference on Mobile Computing and Networking (MobiCom)*, pp. 1-14. 2020.
3. Kai Huang, **Boyuan Yang**, and Wei Gao. “ElasticTrainer: Speeding up on-device training with runtime elastic tensor selection.” In *Proceedings of the 21st Annual International Conference on Mobile Systems, Applications and Services (MobiSys)*, pp. 56-69, 2023.
4. Haoming Wang, **Boyuan Yang**, Xiangyu Yin, and Wei Gao. “Never Start from Scratch: Expediting On-Device LLM Personalization via Explainable Model Selection.” In *Proceedings of the 23rd Annual International Conference on Mobile Systems, Applications and Services (MobiSys)*, pp. 154-168, 2025.
5. Qiyao Xue, Xiangyu Yin, **Boyuan Yang**, and Wei Gao. “PhyT2V: LLM-Guided Iterative Self-Refinement for Physics-Grounded Text-to-Video Generation”. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, pp. 18826-18836, 2025.
6. Xiangyu Yin, **Boyuan Yang**, Weichen Liu, Qiyao Xue, Abrar Alamri, Goeran Fiedler, and Wei Gao. “ProGait: A Multi-Purpose Video Dataset and Benchmark for Transfemoral Prosthesis Users”. In *2025 International Conference on Computer Vision, ICCV 2025*, pp. 8984-8993, 2025.
7. Jifeng Song, Xiangyu Yin, **Boyuan Yang**, Kai Huang, Weichen Liu, and Wei Gao. “Attribution-based Sparse Activation in Large Language Models”. In *Proceedings of the Ninth Conference on Machine Learning and Systems (MLSys)*, 2026.
8. Haoming Wang, Qiyao Xue, Weichen Liu, **Boyuan Yang**, Xiangyu Yin, and Wei Gao. “SpatialMind: Spatially Aware On-Device Embodied AI via Viewpoint Integration”. In *Proceedings of the 32nd Annual International Conference on Mobile Computing and Networking (MobiCom)*, 2026 (to appear).
9. Yihao Liu, Kai Huang, Xingzhe Song, **Boyuan Yang**, and Wei Gao. “Maghacker: eavesdropping on stylus pen writing via magnetic sensing from commodity mobile devices.” In *Proceedings of the 18th Annual International Conference on Mobile Systems, Applications, and Services (MobiSys)*, pp. 148-160, 2020.

演示论文

10. **Boyuan Yang**, Alexander Du, Ozzie Hassel, Jash Uganandan, and Wei Gao. “Demo: MobileClaw: A Notification-Driven, Human-Gated Mobile LLM Agent”. In *Proceedings of the 32nd Annual International Conference on Mobile Computing and Networking (MobiCom)*, 2026 (to appear).

会议海报

11. Ge Yang, **Boyuan Yang**, Yuqi Li, E. Sheffler, Wei Gao, Wei Chen, and Eric Forno. “Smartphone-based ultrasonic respiratory evaluation (SURE) in pediatric asthma patients: A pilot study.” In *D60. Improving Health Care Delivery in Pediatric Pulmonary*, pp. A7226-A7226, American Thoracic Society, 2020.

预印本

12. Weichen Liu, Qiyao Xue, Haoming Wang, Xiangyu Yin, **Boyuan Yang**, and Wei Gao. “Spatial Reasoning in Multimodal Large Language Models: A Survey of Tasks, Benchmarks and Methods.”. *arXiv preprint arXiv:2511.15722*, 2025.

13. Jifeng Song, Kai Huang, Xiangyu Yin, **Boyuan Yang**, and Wei Gao. “Achieving Sparse Activation in Small Language Models.” *arXiv preprint arXiv:2406.06562*, 2024.

14. Kai Huang, **Boyuan Yang**, and Wei Gao. “Modality Plug-and-Play: Elastic Modality Adaptation in Multimodal LLMs for Embodied AI.” *arXiv preprint arXiv:2312.07886*, 2023.

奖项

Student Travel Grants

MLSys 2026	2026 年 5 月
ACM MobiSys 2025	2025 年 6 月
ACM HotMobile 2025	2025 年 2 月
ACM ASPLOS 2022	2022 年 2 月

Android Security Rewards, 谷歌

CVE-2022-22075	2022 年 8 月
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公开演讲

1. 利用智能手机图形处理器侧信道获取用户凭据（Eavesdropping user credentials via GPU side channels on smartphones）, *ASPLOS 2022*, 瑞士洛桑 2022年 2 月

2. 演示：MobileClaw，通知驱动、由用户把关的手机端大语言模型智能体（Demo: MobileClaw: A Notification-Driven, Human-Gated Mobile LLM Agent）, *MobiCom 2026*, 美国奥斯汀 2026年 10 月（即将进行）

教学经历

• 助教, ENGR1869 - 电气工程综述与电路 电气与计算机工程系，匹兹堡大学	2018 年秋
• 助教和实验课主讲, ECE1673 - 线性控制系统 电气与计算机工程系，匹兹堡大学	2019 年春
• 助教和实验课主讲, ECE1160 - 嵌入式计算机系统设计 1 电气与计算机工程系，匹兹堡大学	2019 年秋
• 助教和实验课主讲, ECE2160 - 嵌入式计算机系统设计 2 电气与计算机工程系，匹兹堡大学	2020 年春

专业活动

期刊与会议审稿

- IEEE Transactions on Mobile Computing (TMC) 2020 - 2025
- IEEE Transactions on Industrial Informatics (TII) 2024 - 2025
- IEEE Conference on Computer Communications (INFOCOM) 2020 - 2021
- IEEE/ACM International Symposium on Quality of Service (IWQoS) 2019
- IEEE Intl. Symposium on Personal, Indoor and Mobile Radio Comm. (PIMRC) 2019
- ACM Transactions on Computing for Healthcare (HEALTH) 2026
- Smart Health 2025

会议组织

- Web Chair, IEEE/ACM Conference on Connected Health: Applications, Systems, and Engineering Technologies (CHASE) 2026
- Local Chair, EAI Mobile and Ubiquitous Systems (MobiQuitous) 2022

社会活动

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