Yipeng Pan

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Page https://yppan.uno/ Hong Kong SAR

EDUCATION

China University of Mining and Technology (211) Sep 2015 – Jul 2019
B.Eng. in Electronic Engineering
Recommended to Postgraduate of ShanghaiTech/BIT

The University of Hong Kong Sep 2023 – TBC.
Ph.D. in Computer Science (Robotics)
Supervisor: Dr. Jia Pan
Prof. Anthony G.O. Yeh (Academician, Chinese Academy of Sciences)

CAREER

HKUST iLab
Position: Research Assistant Apr 2021 – Nov 2021
Director: Prof. Weisheng Lu Nov 2022 – Mar 2023

HKUST HKCRC Dec 2021 – Oct 2022
Position: Research Assistant
Director: Prof. Zexiang Li

HKU TransGP Apr 2023 – TBC.
Position: Research Assistant
Director: Prof. Norman C. Tien

SKILLS

Coding: C / C++ / Java / Python
GUI: Qt (C++), Android (Java), IOS (Objective - C)
Cooperation: Git, Docker
Robotics: Linux Shell, ROS
Mechanics: AutoCAD, SolidWorks, 3D Printing
Electronics: Verilog HDL (FPGA), STM32 (HAL, STD), Arduino, PCB Layout (SMT)
Word: LaTeX, Markdown

AWARDS

Gold Award, Hong Kong ICT Awards (Smart Logistics) 2022
2nd Prize, National Electronic Design Competition 2017
National Encouragement Scholarship, Ministry of Education 2018
Honorable Mentions, Mathematical Contest in Modeling 2018
1st Prize, Provincial Electronic Design Competition 2017
2nd Prize, Provincial Electronic Design Competition 2018
2nd Prize, Postgraduate Electronic Design Competition 2019

School Excellent Graduation Design 2019

1st Prize, School Electronic Design Competition 2019

Second Class Scholarship 2017

PUBLICATIONS

[1] Wang, Dawei & PAN, Yipeng & Pan, Jia. “FotoBot: An Embodied AI robot system for photography.” IEEE International Conference on Robotics and Automation (2025)

[2] Xing, Wanli & Lin, Shijie & Yang, Linhan & Zhang, Zeqing & Du, Yanjun & Lei, Maolin & Pan, Yipeng & Pan, Jia. "EROAM: Event-based Camera Rotational Odometry and Mapping in Real-time." 2024 IEEE Transactions on Robotics (2024).

[3] Zheng, Xinzhe, et al. "Magnetometer-Calibrated Hybrid Transformer for Robust Inertial Tracking in Robotics." 2025 IEEE International Conference on Robotics and Automation (ICRA). IEEE, 2025.

[4] Zheng, Xinzhe, et al. "NeurIT: Pushing the limit of neural inertial tracking for indoor robotic IoT." IEEE Transactions on Mobile Computing (2025).

[5] Lu, Liang & Zhang, Yinqiang & Zhou, Peng & Qi, Jiaming & Pan, Yipeng & Fu, Changhong & Pan, Jia. "Semantics-Aware Receding Horizon Planner for Object-Centric Active Mapping." IEEE Robotics and Automation Letters (2024).

[6] Zhou, Peng & Zheng, Pai & Qi, Jiaming & Li, Chengxi & Lee, Hoi-Yin & Pan, Yipeng & Yang, Chenguang & Navarro-Alarcon, David & Pan, Jia. "Bimanual deformable bag manipulation using a structure-of-interest based neural dynamics model." IEEE/ASME Transactions on Mechatronics (2024).

[7] Chen, Junjie & Lu, Weisheng & Pan, Yipeng & Fu, Yonglin. (2024). Building “RoboAvatar”: Industry Foundation Classes–Based Digital Representation of Robots in the Built Environment. Journal of Computing in Civil Engineering.

[8] Chen, Junjie & Fu, Yonglin & Lu, Weisheng & Pan, Yipeng. (2023). Augmented reality-enabled human-robot collaboration to balance construction waste sorting efficiency and occupational safety and health. Journal of Environmental Management.

[9] Lu, Weisheng & Chen, Junjie & Fu, Yonglin & Pan, Yipeng & Ghansah, Frank. (2023). Digital twin-enabled human-robot collaborative teaming towards sustainable and healthy built environments. Journal of Cleaner Production.

Under Review

[RAL] [First Author] WiFi-VIO: Tightly-Coupled WiFi-Visual-Inertial Odometry with A Single Arbitrarily Placed Access Point

[IJRR] [Second Author] Semantic2D: Enabling Semantic Scene Understanding with 2D Lidar Alone

[IJRR] [Third Author] BIM-Loc: BIM-Integrated Discrepancy-Aware LiDAR-based Indoor Localization