

# Yipeng Pan

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(+852) 6733-3260

Hong Kong SAR

## EDUCATION

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**China University of Mining and Technology (211)**

Sep 2015 – Jul 2019

**B.Eng. in Electronic Engineering**

Recommended Admission 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

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**HKUST [iLab](#)**

Position: Research Assistant

Director: Prof. Weisheng Lu

Apr 2021 – Nov 2021

Nov 2022 – Mar 2023

**HKUST [HKCRC](#)**

Position: Research Assistant

Director: Prof. Zexiang Li

Dec 2021 – Oct 2022

**HKU [TransGP](#)**

Position: Research Assistant

Director: Prof. Norman C. Tien

Apr 2023 – TBC.

## SKILLS

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**Coding:** C / C++ / Java / Python

**GUI:** Qt (C++), Android (Java), IOS (Objective - C)

**Cooperation:** Git

**Computer Vision:** OpenCV, Halcon

**Robotics:** Linux Shell, ROS

**Mechanics:** AutoCAD, SolidWorks, 3D Printing

**Electronics:** Verilog HDL (FPGA), STM32 (HAL, STD), Arduino, PCB Layout (SMT)

**Word:** LaTeX, Markdown

## AWARDS

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Gold Award, Hong Kong ICT Awards (Smart Logistics)

2022

2<sup>nd</sup> Prize, National Electronic Design Competition

2017

National Encouragement Scholarship, Ministry of Education

2018

Honorable Mentions, Mathematical Contest in Modeling

2018

1<sup>st</sup> Prize, Provincial Electronic Design Competition

2017

2<sup>nd</sup> Prize, Provincial Electronic Design Competition

2018

2 <sup>nd</sup> Prize, Postgraduate Electronic Design Competition	2019
School Excellent Graduation Design	2019
1 <sup>st</sup> Prize, School Electronic Design Competition	2019
Second Class Scholarship	2017

## PUBLICATIONS

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- [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