Jinqi Wei

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EDUCATION

Southern University of Science and Technology (SUSTech) Shenzhen, China
Bachelor of Engineering in Robotics Engineering 2018/8 – 2022/7

- Advised by Prof. Chaoyang, Song and Study in Bionic Design + Learning Lab.
- SUSTech **First Prize** in Comprehensive Design for the 2021-2022 Academic Year (1/33).
- **Outstanding Undergraduate Graduation Design** of the SUSTech in 2022.

WORK EXPERIENCE

PaXini Technology (Shenzhen) Co., Ltd. Shenzhen, China
Robotics Software Engineer 2023/10 – 2025/7

- Developed humanoid & Teleoperation algorithm, data collection and imitation learning.
- Mentored junior engineers and contributed to the team's growth through technical interviews.
- PaXini 2024 **Starlight Award, 1st**. (Recognizing outstanding employees whose perform far beyond their job level)
- PaXini 2024 Performance Award, 2nd.
- PaXini 2024 **Outstanding Employee**.

Dorabot Inc. Shenzhen, China
Robotics Software Engineer 2022/8 – 2023/9

- Developed industry warehouse (de)palletizing application.

RESEARCH & PROJECT EXPERIENCE

PaXini Technology (Shenzhen) Co., Ltd. Shenzhen, China
Robotics Software Engineer

Humanoid Teleoperation 2023.12 – 2025.7

- Designed and implemented full-stack teleoperation software framework for whole-body teleoperation. Demonstrated at World Robot Conference 2024.
- Built a complete Requirements-Verification-Development-Test-CI/CD process and deployed to a 70-person development team.

Multimodal Data Collection for Imitation Learning 2025.2 – 2025.7

- Used multi-model data collection devices and designed a data process pipeline to collect manipulation information for robot imitation learning. Deployed in PaXini Super EID Factory.
- Fine-tune(full) openpi models on cloud server and inference locally to control different robots. Applied to the Procter & Gamble (P&G) production process.

Dorabot Inc. Shenzhen, China
Robotics Software Engineer 2022.7 – 2023.9

- Developed large-scale (de)palletizing application using heavy-duty KUKA robots and Mixed Integer Programs (MIPs) for industry automated warehouses, achieving a processing speed of up to 1200 boxes per hour per single robot.
- Maintained a (de)palletizing showcase and algorithm verification platform using Yaskawa robots with containerized CI/CD, enabling 24/7 continuous operation.

Ningquan Science and Technology Inc. & SUSTech. Comprehensive Design Shenzhen, China
Algorithm Engineer

Design Science for Reproducible and Shareable Robot Learning 2021.9 – 2022.6

- Proposed a novel method for reproducible and shareable robot learning by focusing on rich and intuitive representation, processing, and storage of manipulation data. This was achieved through the

DeepClaw system that features a unified data storage format, easily accessible web-based software, and open-source, low-cost hardware for teleoperation and data collection.
- Published papers on method and tools from this project in ICARM 2024 and Materials & Design. And used in ME336 Collaborative Robot Learning from 2022 to 2024.

BionicDL Lab, SUSTech Shenzhen, China
Algorithm Engineer 2021.1 – 2021.6
- Course Project (ME336 Collaborative Robot Learning). [GitHub Repo]
- Designed and implemented an automated robotic waste sorting line with visual recognition. Improved sorting efficiency with a throw method rather than a traditional pick-and-place approach.

DJI RoboMaster University Championship Shenzhen, China
Electronics Hardware Team Lead 2019.6 – 2020.10
- Developed robot main control board, supercapacitors and power control modules for the whole robot control and communication.
- RoboMaster2020 University Championship **National Third Prize**

Mechanical Team Member & Financial Manager 2018.10 – 2019.5
- Contributed to the structural design of the infantry robot (wheeled robot that fires high-speed spherical projectiles).
- Responsible for full-season budget (Over 200,000 CNY / 30,000 USD) planning and management.
- RoboMaster2019 South China Regional Competition, **Third Prize**

OPEN SOURCE CONTRIBUTIONS

Robook (Robotics Handbook)
Founder, Maintainer 2023.4 – present
- A robotics handbook for beginners. Contents include introductions to robotics, robotics competitions, and undergraduate research opportunities. Achieved 40000+ views and comments.

ROS2 Chinese Documentation
Maintainer 2024.3 – present
- High-quality, manually proofread ROS2 Chinese documents with annotations.

Others
- Developed Python libraries used in robotics software development released on GitHub
- Contributed to robotics communities such as ROS2, IsaacLab.

PUBLICATION

- T. Wu, Y. Dong, Y. Xiao, **J. Wei**, F. Wan and C. Song, "Vision-based, Low-cost, Soft Robotic Tongs for Shareable and Reproducible Tactile Learning", 2024 International Conference on Advanced Robotics and Mechatronics (ICARM 2024).
- T. Wu, Y. Dong, X. Liu, X. Han, Y. Xiao, **J. Wei**, F. Wan, C. Song, " Vision-based tactile intelligence with soft robotic metamaterial", Materials & Design.

SKILLSET

Robotics & Systems
- Robotics platforms: Franka, UR, KUKA etc.
- Operating systems: Linux, Mac, Windows.
- Systems & tools: ROS2. Server, Website and Web service maintenance.

Software & Programming
- Languages: Python, C/C++, JS, Matlab.
- Tools: Docker, Git-based project management.

Mechanical & Electrical Design
- SolidWorks, AutoCAD. 3D Printing. Altium Designer, EasyEDA.