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GitHub | **LinkedIn** | **Personal Page**

EDUCATION

Nanyang Technological University (NTU), Singapore *July 2020 – July 2024*

- Bachelor of Engineering (Computer Engineering), Distinction Honours
- Awards & Honours: Dean's List (**Top 5%**); Science and Engineering Undergraduate Scholarship (SM2) Scholarship

PUBLICATIONS

- **Chain-of-Action: Trajectory Autoregressive Modeling for Robotic Manipulation** | NeurIPS 2026 [arxiv, website, code]
- **MimicFunc: Imitating Tool Manipulation from a Single Human Video via Functional Correspondence** | CoRL 2025 [arxiv, video, website]
- **Robi Butler: Remote Multimodal Interactions with Household Robot Assistant** | *ICRA 2025* [arXiv, video, website]
- **ManiFoundation Model for General-Purpose Robotic Manipulation of Contact Synthesis with Arbitrary Objects and Robots** | *IROS 2024* [arXiv, website, code]

RESEARCH RELATED WORK&INTERN EXPERIENCES

Research Engineer @ Adaptive Computing Lab, NUS (Full-Time) *Aug 2024 – Aug 2025*

- Supervised by Prof. David Hsu, Smart System Institute (SSI) & School of Computing (SoC)
- Engineered a suite of advanced robotics systems, including a versatile robotic butler, a multi-robot teleoperation framework for imitation learning, and a high-performance whole-body motion planner operating in real-time.

Research Assistant Internship @ LinS Lab, NUS (Part-Time) *Sep 2023 – Jun 2024*

- Supervised by Assistant Prof. Lin Shao, School of Computing (SoC)
- Led development of an enhanced Gaussian Splatting to mesh pipeline for indoor 3D reconstruction [code, doc]

ASTAR Student Research Assistant @ NTU (Part-Time) *Jun 2022 – Jul 2022*

- Implemented a knowledge-based Question and Answer System based on BERT & GPT2 [code]

ACADEMIC PROJECTS

Visibility-Aware Whole Body Grasping *Mar 2025 – May 2025*

- Tackle the mobile grasping with partial, inaccurate observation in changing environment.
- Implemented a keyframe guided framework to **proactively**, **efficiently**, and **continuously** estimate the necessary parts of the **non-stationary** environment.
- Utilize SIMD acceleration to enable 10Hz whole body motion planning on fetch.

Uniform Framework for Data Gathering & Behavior Cloning *Aug 2024 – Feb 2025*

- A comprehensive framework for robot imitation learning that supports multiple data gathering interfaces (GELLO, VR controller, joint stick, and hand tracking) and various robot embodiments (Fetch, Kinova Gen3, Franka FR3). The behavior cloning component implements state-of-the-art approaches including ACT and diffusion policy [code]

3D Reconstruction & Digital Twin *Aug 2024 – Feb 2025*

- Gaussian Splatting to mesh pipeline with multiple regularization, achieved SOTA performance [code]
- Created a high-fidelity Gazebo simulation platform [code]

NTU Final Year Project: Study of local descriptors in Visual Place Recognition *July 2023 – July 2024*

- Developed enhanced descriptor selection methods using semantic segmentation and high-pass filters [code, report]

OTHER WORK&INTERNSHIP EXPERIENCES

Machine Learning Engineer Internship @ Continental AG (Full-Time) *Jan 2023 – Jun 2023*

- Developed the core SLAM modules for autonomous forklift project

RELAVENT COURSE PROJECTS

Intelligent Agents [code]; Neural Network [code]; Embedded Programming [code]; Signal Processing [code]; Advanced Algorithms [code]; Microprocessor [code]; Digital System Design [code]; Object Oriented Design and Programming [code]; Data Science [code]; Data Structure and Algorithm [code];

SKILLS

Languages: Chinese, English; **Programming**: Python , C, C++, Java; **Framework**: ROS1, ROS2, Gazebo, PyTorch