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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" | [[arxiv](#), [website](#), [code](#)]
- "FUNCTO: Function-Centric One-Shot Imitation Learning for Tool Manipulation" | [[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)
- Led foundational research on human-robot teaching interfaces, establishing design principles for household robotics teleoperation that optimize both user experience and robot learning efficiency
- Developed a comprehensive imitation learning pipeline integrating multiple data gathering methods with advanced policy training (ACT, Diffusion Policy) for diverse robotic platforms (Fetch, Kinova Gen3, Franka) [[code](#)]

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

Whole Body Motion Planning in 10Hz

Mar 2025 – May 2025

- Combines SIMD motion planning with hierarchical multilayer RRTC to enable the Fetch robot to perform whole body planning in under 100ms [[code](#)]

Uniform Framework for Data Gathering and 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