Xiao Bowen

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EDUCATION

School of Electronics Engineering and Computer Science, Peking University (PKU)   Beijing, China

B.S. in Computer Science, Major GPA: 3.730/4.0   *Aug 2022-Present*

➢ Core Courses: Advance Mathematics, Linear Algebra, Introduction to Discrete Mathematics, Probability theory and statistics in information science, Set Theory and Graph Theory Numerical Methods, Physics for Information Sciences, Introduction to Artificial Intelligence, Introduction to Intelligent Robot System, Introduction to Computer Vision, Introduction to Embodied AI, Introduction to Computer Systems, Introduction to Generative Models, Advance Rendering, Compiler Principles, Computer Networks, Computer Architecture, Operating System(Honor Track), Open-Source Software, Practice of Programming in C&C++, Data Structure and Algorithm, Algorithm Design and Analysis, Study and Practice on Topics of Frontier Computing

➢ Award: 2024-2025 Zhang Naixin Scholarship, 2024-2025 Meritorious Student in Peking University, 2023-2024 Award for Scientific Research in Peking University, 2022-2023 Award for Scientific Research in Peking University, Provincial First Prize in the 37th Chinese Physics Olympics

RESEARCH EXPERIENCE

FoldNet: Learning Generalizable Closed-Loop Policy for Garment Folding via Keypoint-Driven Asset and Demonstration Synthesis   *Oct 2024-May 2025*

Advisor: He Wang, Tenure-Track Assistant Professor, PKU

*Participation&Status: **Second Author**, accepted by **IEEE Robotics and Automation Letters 2025(RAL)***

➢ Generate demonstrations of folding clothes in simulator for training of diffusion policy

➢ Use UNet(Ronneberger, Fischer, & Brox, 2015) and customized decoder for keypoint detections

➢ Utilized stable diffusion 3.5(stabilityai, 2024) to add texture to cloth meshes

➢ Build cloth templates for automatic cloth mesh generation

RoboHanger: Learning Generalizable Robotic Hanger Insertion for Diverse Garments   *Jul 2024-Oct 2024*

Advisor: He Wang, Tenure-Track Assistant Professor, PKU

*Participation&Status: **Co-first Author**, accepted by **IEEE Robotics and Automation Letters 2026(RAL)***

➢ Devise Primitive-Based method for generalizable robotic hanger insertation

➢ Use PointNet++(Qi, Yi, Su, & Guibas, 2017) to detect manipulation points on hanger

➢ Use Blender to generate hangers with random shapes and physical attributes

WORK EXPERIENCE

Galbot | Beijing, China | Researcher   *Jul 2024-Present*

➢ Develop machine learning algorithms and applications tailored to our company's robotic products.

Peking University Admissions Office | Beijing, China | Office Assistant   *Jun 2022-Aug 2022*

➢ School and potential student communication, mobilized potential students and introduced basic information

LEADERSHIP AND ACTIVITIES

Peking University Admissions Office | Beijing, China | Office Assistant   *Jun 2022-Aug 2022*

➢ School and potential student communication, mobilized potential students and introduced basic information

ADDITIONAL INFORMATION

➢ Language Skills: Chinese Mandarin (native speaker), English (proficient)

➢ Computer Skills: Python, C&C++