

# 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: 3.716/4.0*

*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, Practice of Programming in C&C++, Data Structure and Algorithm, Algorithm Design and Analysis, Study and Practice on Topics of Frontier Computing, Compiler Principles, Computer Networks
- Award: 2023-2024 Award for Scientific Research in Peking University, Provincial First Prize in the 37<sup>th</sup> Chinese Physics Olympics

## RESEARCH EXPERIENCE

**FoldNet: Learning Generalizable Closed-Loop Policy for Garment Folding via Keypoint-Driven Asset and Demonstration**

Synthesis | PKU | Researcher

Beijing, China

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

*Oct 2024-May 2025*

- 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** | PKU | Researcher

Beijing, China

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

*Jul 2024-Oct 2024*

- Devise Primitive-Based method for generalizable robotic hanger insertion
- 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++