

# Jiazi Bu

✉ bujiazi001@sjtu.edu.cn

☎ (+86) 139 9552 3308

🔗 bujiazi.github.io

🌐 Bujiazi

## Education

**B.S. Shanghai Jiao Tong University (SJTU), Artificial Intelligence (GuoZhi Class)**

Shanghai, China  
Sept 2021 – June 2025

- **GPA:** 4.04/4.3; **Average Score:** 93.10/100; **Rank:** 5/95 (**TOP 5%**).
- **Languages:** TOEFL iBT 105 (R:29, L:27, S:23, W:26); CET4: 636; CET6: 612.
- **Skills:** Python, C++, C, LaTeX. Familiar with *PyTorch* and *Diffusers*.
- **Research Interests:** Generative Models (2D AIGC), Computer Vision.
- **Related Coursework:** Mathematical Analysis (A+), Linear Algebra (A), Data Structure (A+), Data Mining (A+), Algorithm Design and Analysis (A+), Deep Learning (A+), Computer Vision (A-), Reinforcement Learning (A+).

## Experience

**Shanghai Artificial Intelligence Laboratory, Ph.D.** (Sept 2025 - ) & Research Intern

Shanghai, China  
Nov 2023 – Now

- Research Fields: Generative Models and Large Vision-Language Models.
- Advisor: Prof. [Dahua Lin](#).
- Mentor: Dr. [Jiaqi Wang](#), Dr. [Yuhang Zang](#) and Dr. [Tong Wu](#).

**SJTU ReThinklab**, Research Intern

Shanghai, China  
Oct 2022 – May 2024

- Research Fields: Computer Vision and AI4Science.
- Advisor: Prof. [Junchi Yan](#).

## Publications (\* indicates Co-First author)

**[NeurIPS 2025] HiFlow: Training-free High-Resolution Image Generation with Flow-Aligned Guidance**

**Jiazi Bu\***, Pengyang Ling\*, Yujie Zhou\*, Pan Zhang, Tong Wu, Xiaoyi Dong, Yuhang Zang, Yuhang Cao, Dahua Lin, Jiaqi Wang  
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**[CVPR 2025] ByTheWay: Boost Your Text-to-Video Generation Model to Higher Quality in a Training-free Way**

**Jiazi Bu\***, Pengyang Ling\*, Pan Zhang, Tong Wu, Xiaoyi Dong, Yuhang Zang, Yuhang Cao, Dahua Lin, Jiaqi Wang  
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**[Under Review] DiCache: Let Diffusion Model Determine Its Own Cache**

**Jiazi Bu\***, Pengyang Ling\*, Yujie Zhou\*, Yibin Wang, Yuhang Zang, Tong Wu, Dahua Lin, Jiaqi Wang  
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**[ICLR 2025] MotionClone: Training-free Motion Cloning for Controllable Video Generation**

Pengyang Ling\*, **Jiazi Bu\***, Pan Zhang, Xiaoyi Dong, Yuhang Zang, Tong Wu, Huaian Chen, Jiaqi Wang, Yi Jin  
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**[ICCV 2025] Light-A-Video: Training-free Video Relighting via Progressive Light Fusion**

Yujie Zhou\*, **Jiazi Bu\***, Pengyang Ling\*, Pan Zhang, Tong Wu, Qidong Huang, Jinsong Li, Xiaoyi Dong, Yuhang Zang, Yuhang Cao, Anyi Rao, Jiaqi Wang, Li Niu  
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**[Under Review] G<sup>2</sup>RPO: Granular GRPO for Precise Reward in Flow Models**

Yujie Zhou\*, Pengyang Ling\*, **Jiazi Bu\***, Yibin Wang, Yuhang Zang, Jiaqi Wang, Li Niu, Guangtao Zhai  
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**[Under Review] Pref-GRPO: Pairwise Preference Reward-based GRPO for Stable Text-to-Image Reinforcement Learning** (& *UniGenBench* proposed in this work)

Yibin Wang\*, Zhimin Li\*, Yuhang Zang\*, Yujie Zhou, **Jiazi Bu**, Chunyu Wang, Qinglin Liu, Cheng Jin, Jiaqi Wang

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## **[NeurIPS 2024] Unveiling The Matthew Effect Across Channels: Assessing Layer Width Sufficiency via Weight Norm Variance**

Yiting Chen, **Jiazi Bu**, Junchi Yan

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## **[AAAI 2024] ViTree: Single-Path Neural Tree for Step-Wise Interpretable Fine-Grained Visual Categorization**

Danning Lao, Qi Liu, **Jiazi Bu**, Junchi Yan, Wei Shen

[Paper](#) / [Code](#)

## **[SCIENCE CHINA Information Sciences] Drug-drug Interaction Prediction via Hierarchical Structure Modeling**

Huaijin Wu, **Jiazi Bu**, Nianzu Yang, Yao Sun, Haitao Song, Ning Liu, Junchi Yan

[Paper](#) / [Code](#)

## Projects

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### **[arXiv 2023] MetaScript: Few-Shot Handwritten Chinese Content Generation via Generative Adversarial Networks**

[Report](#) / [Code](#)

- **Jiazi Bu\***, Qirui Li\*, Kailing Wang\*, Xiangyuan Xue\*, Zhiyuan Zhang\*
- Developed a novel Chinese content generation system that can specify styles based on Generative Adversarial Networks (GANs).
- Tools Used: Python, LaTeX.

### **DeepMovie**

[Poster](#) / [Code](#)

- **Jiazi Bu\***, Zhiyuan Zhang\*, Xizhuo Zhang\*
- Developed a plug-and-play DNN training pipeline turning most deep learning base modules into a movie recommender system.
- Tools Used: Python.

### **VR Pacman**

[Code](#)

- Xiangyuan Xue, **Jiazi Bu**, Hanglei Zhang, Zhulin Hu, Qirui Li
- Developed a 3D first-person Pac-Man game using the Unity engine.
- Tools Used: C, C++, Unity.

## Honors & Awards

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### **Ye Jun and Shen Nanpeng Outstanding Scholarship**

2025

- ¥ 20000, received as **one of the TOP 30 graduates** of SJTU.

### **Zhiyuan Honors Scholarship**

2021, 2022, 2023, 2024

- ¥ 5000 per year, received as part of the SJTU Zhiyuan Honor Programme.

### **Guozhi Scholarship**

2022

- ¥ 8000, received as being in the **TOP 15%** of SJTU AI students.

### **SJTU Undergraduate Scholarship**

2022, 2023, 2024, 2025

### **CUMCM National First Prize (TOP 0.55%) & First Prize in Shanghai Chapter**

2023

### **SJTU Zhiyuan Honor Bachelor's Degree**

2025

### **SJTU President Award**

2023

- Received for serving as a student volunteer during the COVID-19 pandemic.

### **SJTU Outstanding Freshman Training Camp Member**

2021

### **SJTU Outstanding Graduate**

2025

### **SJTU Best Bachelor's Thesis (TOP 1%)**

2025