Jiazi Bu

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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; 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
Page ↗ / Paper ↗ / Code ↗

[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^2RPO: Granular GRPO for Precise Reward in Flow Models

Yujie Zhou*, Pengyang Ling*, *Jiazi Bu**, Yibin Wang,Yuhang Zang, Jiaqi Wang, Li Niu, Guangtao Zhai
Page ↗ / Paper ↗ / Code ↗

[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

Page ⬈ / Paper ⬈ / Code (Pref-GRPO) ⬈ / Code (UniGenBench) ⬈

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

Yiting Chen, *Jiazi Bu*, Junchi Yan

Paper ⬈ / Code ⬈

[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

[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

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, received as part of the Zhiyuan Honor Program.

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