Jiazi Bu

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Education

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

- 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+).

Shanghai, China Sept 2021 – June 2025

Experience _

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

• 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

• Research Fields: Computer Vision and Al4Science.

· Advisor: Prof. Junchi Yan.

Shanghai, China Nov 2023 – Now

Shanghai, China Oct 2022 – May 2024

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 Page ☑ / Paper ☑ / Code ☑

[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 Page ☑ / Paper ☑ / Code ☑

[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] G²RPO: 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] UniGenBench++: A Unified Semantic Evaluation Benchmark for Text-to-Image Generation

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

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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 Page ☑ / Paper ☑ / Code ☑

[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.

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.

Honors & Awards

Ye Jun and Shen Nanpeng Outstanding Scholarship • ¥ 20000, received as one of the TOP 30 graduates of SJTU.	2025
 Zhiyuan Honors Scholarship ¥ 5000 per year, received as part of the SJTU Zhiyuan Honor Programme. 	2021, 2022, 2023, 2024
 Guozhi Scholarship ¥ 8000, received as being in the TOP 15% of SJTU AI students. 	2022
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
• Received for serving as a student volunteer during the COVID-19 pandemic.	2023
SJTU Outstanding Freshman Training Camp Member	2021
SJTU Outstanding Graduate	2025
SJTU Best Bachelor's Thesis (TOP 1%)	2025