

ANTHONY CHEN

Nationality: UK | Cell: (86)18801193450 | Email: antonchen@pku.edu.cn | Personal Website: atchen.com

EDUCATION

Peking University M.S in Computer Science Advisor: Prof. Shanghang Zhang and Prof. Huizhu Jia Honors: Chinese Government Scholarship;	Beijing, CN <i>Sep 2023 - Jul 2026 (expected)</i>
Peking University B.S in Computer Science Advisor: Prof. Shanghang Zhang Honors: Outstanding Thesis Award; Chinese Government Scholarship;	Beijing, CN <i>Sep 2019 - Jul 2023</i>

RESEARCH INTERESTS

I am particularly interested in improving the controllability of generative models, with a focus on personalization in diffusion models. I am also interested in the interaction between humans and generative systems, aiming to design more intuitive and effective ways to guide generation. More broadly, I am fascinated by the potential of diffusion models to serve as world models, bridging generation and reasoning to support predictive and interactive applications.

RESEARCH & INDUSTRY EXPERIENCE

Tel Aviv University Visiting Student Hosted by Prof. Daniel Cohenor	Tel Aviv, IL <i>June 2025 – Now</i>
<ul style="list-style-type: none">• Researched on controlling real-time video generation models with synthetic human motion.• Researched on unified models for visual understanding and image generation.	

Li Auto Research Intern Mentored by Dr. Yida Wang	Beijing, China <i>Oct 2024 – May 2025</i>
<ul style="list-style-type: none">• Researched 3D-conditioned driving world model that enforces robust 3D consistency and enables interactive scene editing. Led to a paper submitted to ICRA 2026.	

UC Berkeley Remote Visiting Student Hosted by Prof. Kurt Keutzer	Berkeley, US <i>May 2024 – Oct 2024</i>
<ul style="list-style-type: none">• Proposed Split-Ensemble training method that improves accuracy and OOD uncertainty estimation without extra data or inference cost. Led to a paper in ICML 2024.	

Xiaohongshu Research Intern Mentored by Haofan Wang	Beijing, CN <i>Mar 2023 – Apr 2024</i>
<ul style="list-style-type: none">• Developed diffusion model with zero-shot human portrait personalization. Led to an open source project with 12k+ stars.• Developed a training-free technique for style-transfer on diffusion models. Led to an open source project with 2k+ stars.	

Oppo Research Institute Research Intern Mentored by Dr. Yandong Guo	Beijing, CN <i>Oct 2022 – Mar 2023</i>
<ul style="list-style-type: none">• Researched and developed new techniques for multi-modal pretraining, resulting in a generalized backbone model that can be used in object detection and image classification. Led to a paper in CVPR 2023.	

PUBLICATIONS & MANUSCRIPTS

Conference Papers

- Xiaowei Chi, Hengyuan Zhang, Chun-Kai Fan, Xingqun Qi, Rongyu Zhang, **Anthony Chen**, Chi-min Chan, Wei Xue, Wenhan Luo, Shanghang Zhang, Yike Guo. EVA: An Embodied World Model for Future Video Anticipation. *International Conference on Machine Learning (ICML)*, 2025.
- **Anthony Chen***, Huanrui Yang*, Yulu Gan*, Denis A Gudovskiy, Zhen Dong, Haofan Wang, Tomoyuki Okuno, Yohei Nakata, Shanghang Zhang, Kurt Keutzer. Split-Ensemble: Efficient OOD-aware Ensemble via Task and Model Splitting. *International Conference on Machine Learning (ICML)*, 2024.
- **Anthony Chen***, Kevin Zhang*, Renrui Zhang, Zihan Wang, Yuheng Lu, Yandong Guo, and Shanghang Zhang. PiMAE: Point cloud and image interactive masked autoencoders for 3d object detection. *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023.

Working Manuscripts

- **Anthony Chen***, Wenzhao Zheng*, Yida Wang*, Xueyang Zhang, Kun Zhan, Peng Jia, Kurt Keutzer, Shangbang Zhang. GeoDrive: 3D Geometry-Informed Driving World Model with Precise Action Control. *Under Review*.
- Xiaowei Chi, ..., **Anthony Chen**, ... WoW: Towards a World Omniscient World Model Through Embodied Interaction. *Under Review*.
- Min Lu, Yuanfeng He, **Anthony Chen**, Jianhuang He, Daniel Cohen-Or, Hui Huang. Abstraction in Style. *Under Review*.
- Min Lu, Yuanfeng He, **Anthony Chen**, Zheng Gu, Zhida Sun, Zhenyu Wang, Daniel Cohen-Or, Hui Huang. Semantic-guided Recoloring for Compact Image Vectorization. *Under Review*.

SELECTED PROJECTS

Training-free Regional Prompting for Diffusion Transformers

Project Leader | [\[Github Page\]](#) (600+ stars)

- Developed a FLUX-based training-free layout-to-image generation method. Reduced generation time by 80% and VRAM usage by 90% compared to previous state-of-the-art methods.

InstantStyle: Free Lunch towards Style-Preserving in Text-to-Image Generation

Core contributor | [\[Github Page\]](#) (2k+ stars).

- Investigated inter-block difference in diffusion model and developed a training-free style-transfer method.

InstantID: Zero-shot Identity-Preserving Generation in Seconds

Core contributor | [\[Github Page\]](#) (12k+ stars)

- Developed a feed-forward human portrait personalization diffusion model that achieves sota performance.

SKILLS & LANGUAGES

Technical Skills: Python, Pytorch, HTML/CSS, blender

Languages: Mandarin (Native), English (Native), Japanese (Proficient), Russian (Fluent), Cantonese (Fluent)

ACADEMIC SERVICE

Reviewer in Pacific Graphic 2025

Reviewer in ICCV 2025

Reviewer in SIGGRAPH 2024