

Runqian (Ray) Wang

Email: raywang4@{berkeley, mit}.edu Website: <https://raywang4.github.io>

Education

University of California, Berkeley

Sep 2026 - Present

PhD in Computer Science. Advisor: Alexei (Alyosha) Efros

Massachusetts Institute of Technology

Sep 2022 - May 2026

Bachelor of Science. Double Major in Artificial Intelligence & Mathematics, GPA: 5.0/5.0

Selected Publications

Wang, R. and Du, Y., 2025. Equilibrium Matching: Generative Modeling with Implicit Energy-Based Models. arXiv preprint arXiv:2510.02300.

Wang, R. and He, K., 2025. Diffuse and Disperse: Image Generation with Representation Regularization. arXiv preprint arXiv:2506.09027.

Hu, K., Cy, A., Qiu, L., Ding, X.D., **Wang, R.**, Zhu, Y.E., Andreas, J., and He, K., 2025. ARC Is a Vision Problem. arXiv preprint arXiv:2511.14761.

Experiences

Harvard University Embodied Minds Lab

May 2025 - May 2026

Visiting Researcher, PI: Yilun Du

- Led work on Equilibrium Matching, a framework for generative modeling via implicit energy based model

MIT He Vision Group

Apr 2024 - May 2026

Researcher, PI: Kaiming He

- Led work on Dispersive Loss, a self-contained representation regularizer to improve diffusion models
- Demonstrated simple vision models can match LLM performance on abstract reasoning

MIT CSAIL Medical Vision Group

Sep 2022 - May 2023

Researcher, PI: Polina Golland

- Designed a new deep-learning approach to intravascular ultrasound image analysis

MIT-IBM-Watson AI Lab

Sep 2023 - May 2024

Research Intern

- Led development of data-free transferrable parameter efficient fine-tuning methods for language models

Microsoft Research Asia

May 2023 - Aug 2023

Research Intern, PI: Zhirong Wu

- Analyzed and designed state-of-the-art adaptive optimization methods in deep learning
- Work spotlighted by Microsoft and nominated as “Star of Tomorrow” researcher

Research Intern

- Led pre-training scaling research for autoregressive video generation models

Invited Talks

Microsoft Research New England Generative Modeling and Sampling Seminar	Dec 2025
Google Deepmind Internal Talk	Dec 2025

Academic Services

Teaching Assistant for 6.7900 Graduate Course in Machine Learning	Sep 2024 - Dec 2024
Reviewer for NeurIPS, ICLR	2024 - Present

Selected Awards & Programs

USA Computing Olympiad National Camp Qualifier	May 2021
• Ranked top 14 among all US high school students in algorithmic design and competitive programming	
MIT BattleCode Programming Competition 2 nd Place	Feb 2023
• Entered final tournament as 1 st seed out of 456 teams (1321 competitors) worldwide and ranked 2 nd in the finals	
Terminal Programming Competition 3 rd Place	Apr 2023
Jane Street First Year Trading and Technology Program	Mar 2023
Discover Citadel Program	Apr 2024

Skills

Language & Tools: Python, PyTorch, JAX, Sklearn, Matplotlib, C++, Java, Wandb

Deep Learning: Generative Models (Diffusion, Flow Matching, GAN, EBM), Optimization, Model Architectures, Representation Learning, Large Language Model, Parameter Efficient Fine-tuning, Data Synthesis