# Ali Cy

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### EDUCATION

# Massachusetts Institute of Technology Cambridge, MA MEng in Electrical Engineering & Computer Science Sep. 2025 - Present BSc in EECS, Minor in Literature (GPA: 4.8/5.0) Sep. 2022 - Present • Teaching Assistant: 6.796 Deep Learning • EECS Coursework: 6.748 Information Theory, 6.S894 Accelerated Computing, 6.S953 Embodied Intelligence (A), 6.790 Machine Learning (A), 6.780 Inference and Information (A) • Other Coursework: 7.05 Biochemistry (A), 18.701 Abstract Algebra (A), 8.05 Quantum Physics II (A) Publications 1. Keya Hu, Ali Cy, Linlu Qiu, Xiaoman Delores Ding, Runqian Wang, Yeyin Eva Zhu, Jacob Andreas, Kaiming He. ARC is a vision problem! arXiv: 2511.14761. Preprint.

2. Zhitong Gao, Parham Rezaei, Ali Cy, Nataša Jovanović, Mingqiao Ye, Jesse Allardice, Afshin Dehghan, Roman Bachmann, Oğuzhan Fatih Kar, Amir Zamir. Image generation by test-time search over tokens. In submission to CVPR 2026.

3. Ali Cy\*, Anugrah Chemparathy\*, Michael Han, Rumen Dangovski, Peter Lu, Marin Soljacic. Studying phase transitions in contrastive learning with physics-inspired datasets. ICML 2023 Physics4ML Workshop.

# F

MEng & Undergraduate Researcher	Feb. $2025 - Present$
PI: Kaiming He, MIT EECS	$Cambridge,\ MA$
<ul><li>Visual methods for abstract reasoning (ARC).</li><li>Adaptation of diffusion models into energy-based models.</li></ul>	
PI: <u>Amir Zamir</u> , EPFL	$Lausanne,\ Switzerland$
• Latent verifiers for search over images.	
Undergraduate Researcher	Feb. 2023 – Feb. 2025
PI: <u>Vincent Sitzmann</u> , MIT EECS	$Cambridge,\ MA$
• Unsupervised optical flow estimation.	
Undergraduate Researcher	Jun. $2021 - \text{Feb. } 2023$
PI: <u>Marin Soljačić</u> , MIT Physics	$Cambridge,\ MA$
• Training dynamics of contrastive learning.	
• Period of time includes high school internship.	
Honors	
NSF Graduate Research Fellowship	2025
European Girls' Math Olympiad Silver Medal	2020

## Other Projects

1. Ali Cy\*, Kairo Morton\*. Training diffusion policies without expert data. 6.S953 Embodied Intelligence Final Course Project, 2024.

# Leadership & Outreach

#### President & Founder Aug. 2020 – Sep. 2023 AthemathOnline

- Organized online math olympiad classes in which women teach women math. Currently has ~100 students/year.
- Created and designed program. Led logistics, fundraising, staff recruitment, admissions; taught classes, ran events.

Last updated Dec. 2025