Luke J. Huang

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Education

MIT Cambridge, MA

Physics + CS: 5.0/5.0 GPA *Fall 2024 - Present*

- Coursework: Distributed Systems (6.5840, G), Mathematical Statistics: a Non-Asymptotic Approach (18.656, G), Deep Learning (6.7960, G), Information Theory (6.7480 G), Inference and Information (6.7800 G), Design and Analysis of Algorithms (6.1210), Algebra I (18.701), Quantum Physics III (8.06)

Experience

OpenAI May 2026 – Present

Member of Technical Staff (Resident) *San Francisco, CA*

- Pretraining

Applied Compute Jun 2025 – Sep 2025

Research Scientist Intern *San Francisco, CA*

- Built large-scale RL training infrastructure for out-of-distribution reasoning tasks for enterprise customers.
- Delivered an asynchronous RL framework for high throughput training and a Torchtitan/FSDP-based backend supporting large-scale 100B+ MoE models

Han AI Lab Aug 2024 – Present

Researcher *Cambridge, MA*

- First author of Variance Controlled Policy Optimization, a robust asynchronous RL algorithm delivering **2.5x** faster on long-horizon tool-use tasks. Under Review
- Co-first author of Locality-Aware Parallel Decoding, a novel multi-token prediction architecture **13x** faster than previous autoregressive (AR) image generation models. **ICLR 2026 Oral, Top 1.13% of over 19,000 submissions**
- Trained low-latency generative image models to provide visual guidance to vision-language-action (VLA) systems as part of ForeAct, with a +40.9% absolute improvement over the Physical Intelligence's π_0 VLA. **CVPR 2026**

Publications & Preprints

Huang, L., Zhang, Z., Hu, Q., Yang, S., Han, S. *Stable Asynchrony: Variance Controlled Off-Policy RL for LLMs.* ICML 2026 Paper — Code

Zhang, Z.*, **Huang, L.***, Wu, C., Yang, S., Peng, K., Lu, Y., Han, S. *Locality-aware Parallel Decoding for Efficient Autoregressive Image Generation.* ICLR 2026 Oral, Top 1.13%. Paper — Code

Zhang, Z., Yang, S., Hu, Q., **Huang, L.**, Hou, J., Sun, Y., Lu, Y., Han, S. *ForeAct: Steering Your VLA with Efficient Visual Foresight Planning.* CVPR 2026. Paper — Code

Uddin, S. Z.*, Vaidya, S.*, Choudhary, S., Chen, Z., Salib, R. K., **Huang, L.**, Englund, D. R., Soljačić, M. *AI-Driven Robotics for Free-Space Optics.* Paper

Honors Awards

Putnam Top 200, 2024 U.S. IPhO Team and Gold Medalist (3rd place overall over 256 participants / 55 countries), Regeneron STS Finalist (Top 40), Math Olympiad Program (MOP) Attendee and USA(J)MO Winner, RSI Scholar (2023)