

# Kento Nishi

✉ kentonishi@college.harvard.edu | 🌐 KentoNishi | 🌐 kentonishi.com

## Education

### Harvard College

Harvard College Class of 2026. GPA: 3.973.

2022-present

Cambridge, Massachusetts

### Lynbrook High School

Class of 2022. GPA: 4.0 (Unweighted). Valedictorian.

2018-2022

San Jose, California

**Languages:** Bilingual Japanese & English. **Certificates:** NVIDIA Deep Learning Institute “Fundamentals of Deep Learning for Computer Vision,” Stanford “Machine Learning.” **Skills:** Python, TypeScript/JS, C++, Java; PyTorch, Svelte, OpenGL.

## Publications & Research

### Joint-Task Regularization for Partially Labeled Multi-Task Learning

Feb. 2024

*Conference on Computer Vision and Pattern Recognition (IEEE/CVF CVPR 2024)*

- Kento Nishi, Junsik Kim, Wanhua Li, Hanspeter Pfister.

### Towards an Understanding of Stepwise Inference in Transformers: A Synthetic Graph Navigation Model

Feb. 2024

*arXiv Preprint*

- Mikail Khona, Maya Okawa, Rahul Ramesh, **Kento Nishi**, Robert P. Dick, Ekdeep Singh Lubana, Hidenori Tanaka.

### Stepwise Inference in Transformers: Exploring a Synthetic Graph Navigation Task

Dec. 2023

*Conference on Neural Information Processing Systems (NeurIPS 2023)*

R0-FoMo

- Mikail Khona, Maya Okawa, Rahul Ramesh, **Kento Nishi**, Robert P. Dick, Ekdeep Singh Lubana, Hidenori Tanaka.
- Paper and poster in the Robustness of Few-shot and Zero-shot Learning in Large Foundation Models workshop.

### Augmentation Strategies for Learning with Noisy Labels

Jun. 2021

*Conference on Computer Vision and Pattern Recognition (IEEE/CVF CVPR 2021)*

pp. 8022-8031

- **Kento Nishi**, Yi Ding, Alex Rich, Tobias Höllerer.
- Presented a video and poster in the main 2021 CVPR conference. Cited 104 times as of April 2024.

### Improving Label Noise Robustness with Data Augmentation and Semi-Supervised Learning

Feb. 2021

*Association for the Advancement of Artificial Intelligence (AAAI 2021)*

pp. 15855-15856

- **Kento Nishi**, Yi Ding, Tobias Höllerer.
- Presented a short paper and poster. Predecessor to the CVPR 2021 publication. Cited 4 times as of April 2024.

### Other Research

- **Invited speaker** for the 2022 Forum on Information Technology Conference Top Conference Session.
- Browser Extension Standards: How Google Monopolized and Exploited the Web Browser Industry (2022).

## Awards

### John Harvard Scholarship

2023

*Top 5% of the Harvard College Class of 2026 in the 2023 Academic Year.*

### Ezoe Memorial Recruit Foundation Scholarship Recipient

2023

*One of Japan's most selective scholarship programs for student researchers (roughly 6 recipients per year).*

### Regeneron Science Talent Search Top 300 Scholar

2022

*Awarded for thesis titled "Augmentation Strategies for Learning With Insufficient Data."*

## Projects & Libraries

**LiveTL:** Co-founding developer of a browser extension and mobile app for TV-like subtitles for online livestreams. 50K+ total users, 500+ stars on GitHub, and 20+ contributors from 10+ countries.

**HyperChat by LiveTL:** Founding developer of a browser extension for improving the YouTube livestream chat. Integrated into LiveTL. Combined 65K+ users. Endorsed by major streamers on YouTube. 180+ stars on GitHub.

**Hololive English Christmas Advent Calendar:** Developed holoen-advent.com as an officially commissioned project under Hololive English (Cover Corp). Served 50K+ unique viewers in Dec. 2022 and 140K+ unique viewers in Dec. 2023.

**Torch Pitch Shift:** First pitch-shifting Python library with GPU support for ML. 100K+ downloads/month. 100+ stars on GitHub. Developed alongside torch-audiomentations (800+ stars on GitHub) with the Asteroid open-source dev team.