Kento Nishi

Education and Affiliations

Harvard University 2022-present

Harvard College Class of 2026. GPA: 4.0. Cambridge, Massachusetts

Harvard Visual Computing Group 2022-present

Computer Vision Research Intern Cambridge, Massachusetts

Lynbrook High School 2018-2022

Class of 2022. GPA: 4.0 (Unweighted). San Jose, California

University of California, Santa Barbara 2020-2022

Visiting Researcher at the UCSB Four Eyes Lab Santa Barbara, California

San Francisco Japanese School 2011-2019

Saturday school supported by Japanese government. Graduated in 2019. San Jose, California

Publications & Research

Conference on Computer Vision and Pattern Recognition [IEEE/CVF CVPR]

June 2021

"Augmentation Strategies for Learning with Noisy Labels"

pp. 8022-8031

- First author of a full-length paper. Affiliated with the UCSB Research Mentorship Program and Four Eyes Lab.
- Prepared a video and poster. Presented in the main CVPR conference in June 2021.
- · Cited 47 times as of December 2022.

Association for the Advancement of Artificial Intelligence [AAAI-21]

February 2021

"Improving Label Noise Robustness with Data Augmentation and Semi-Supervised Learning" pp. 15855-15856

- First author of a short paper. Affiliated with the UCSB Research Mentorship Program and Four Eyes Lab.
- Presented a poster in the AAAI Student Poster session in February 2021.

Forum on Information Technology Conference (FIT)

September 2022

Invited speaker for the Top Conference Session at FIT 2022

Harvard Science @ Work Capstone Paper

Fall 2022

Browser Extension Standards: How Google Monopolized and Exploited the Web Browser Industry

Awards

Ezoe Memorial Recruit Foundation Scholarship Recipient

2023

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

Valedictorian 2022

Lynbrook High School

Regeneron Science Talent Search Top 300 Scholar

2022

"Augmentation Strategies for Learning With Insufficient Data"

Synopsys Science Fair Excellence in Computer Science Award

2021

"Augmentation Strategies for Learning with Noisy Labels"

USA Computing Olympiad Gold Division

2020

USACO 2020 US Open Contest

Coursework

Subject	Course ID	Institution	Date	Grade	Credits
Systems Programming and Machine Organization	COMPSCI 61	Harvard University	Fall 2022	Α	4.0
Vector Calculus and Linear Algebra I	MATH 22A	Harvard University	Fall 2022	Α	4.0
Science @ Work	HISTSCI 1990	Harvard University	Fall 2022	Α	4.0
Expository Writing 20: Privacy and Surveillance	EXPOS 20 250	Harvard University	Fall 2022	Α	4.0
Intermediate Calculus	MATH 004A	West Valley College	Spring 2022	Α	4.0
Linear Algebra	MATH 004C	West Valley College	Fall 2021	Α	4.0
Differential Equations	MATH 004B	West Valley College	Spring 2021	Α	4.0
Computer Programming II (C++)	CIST 004B	West Valley College	Fall 2020	Α	4.0
Presentation Techniques in Research	INT 93P	UC Santa Barbara	Summer 2020	Α	4.0
Introduction to Research Techniques	INT 93R	UC Santa Barbara	Summer 2020	Α	4.0
Research in STEM	INT 93LS	UC Santa Barbara	Summer 2019	Α	4.0

APs: Calculus BC (5), Chemistry (5), Computer Science A (5), Japanese (5), Language & Composition (4), Literature & Composition (4), Physics C Electricity & Magnetism (5), Physics C Mechanics (5), Statistics (5)

Certificates: Stanford Coursera "Machine Learning" (2A7SM5AGNJFC), NVIDIA Deep Learning Institute "Fundamentals of Deep Learning for Computer Vision" (0f17ae21083b444caf0d60afa0ea8f04)

Skills

Languages: Japanese (native), English (native)

Programming Languages: Python, JavaScript/TypeScript/HTML/CSS, C++, Java, Rust

Technologies: PyTorch, Svelte, Vue, Git, Docker, ssh, VSCode, SQL, Linux, etc.

<u>GitHub</u>: 1100-day daily commit streak, 17K+ total commits, 130+ pull requests, contributed to 35+ open-source projects

Other: Long-distance running, electronic music composition/production, guitar/ukulele

Projects & Libraries

LiveTL: Co-founder of a browser extension and mobile app for TV-like subtitles for online livestreams. 50K+ total users, 350+ stars on GitHub, and 20+ contributors from 10+ countries.

HyperChat by LiveTL: Founder of a browser extension for improving the YouTube livestream chat experience. Built into LiveTL (50K+ total users), with 13K+ additional non-LiveTL users. 100+ stars on GitHub.

Hololive English 2022 Holiday Advent Calendar: Developed <u>holoen-advent.com</u> in an official collaboration with talent Takanashi Kiara (1.4M+ subscribers) of Hololive English (Cover Corp). Served 50K+ unique viewers in December 2022.

Pogify: Synchronized music playback for online streams. 10+ contributors, 50+ stars on GitHub, 15K+ social media likes.

IFrame Translator: Free JS/TS text translation engine. Used in LiveTL and HyperChat to auto-translate user comments.

Torch Pitch Shift: First pitch-shifting Python library with GPU support (13K+ downloads/month). 70+ stars on GitHub. Developed alongside *torch-audiomentations* (300+ stars on GitHub) with the open source Asteroid developer team.

Extracurricular Activities

Harvard Al Safety Team (HAIST): Participated in the semester-long Al Safety Fellowship Program to learn about the fundamentals of Al safety and interpretability. Will conduct research in the group in the coming semesters.

Harvard Undergraduate Machine Intelligence Community (HUMIC): Joined the HUMIC Theory Board team. Will organize and host introductory presentations in the coming semesters.

Harvard Computer Society (HCS): Participated in several workshops across diverse subfields within CS. Will potentially host workshops in the future.

Leadership Experience

LiveTL: Currently lead an international development team for three open-source extensions (LiveTL, HyperChat, YtcFilter). **San Fransisco Japanese School PTA:** Led the development of an all-new library system during COVID (2020-2022).

Lynbrook Computer Science Club: Co-president (2021-2022), Secretary (2020-2021).

Lynbrook Machine Learning Club: Co-president (2021-2022), Secretary (2020-2021).

Lynbrook WebDev Club: Project Coordinator (2021-2022), President (2020-2021), Lead Developer (2019-2020).