

# Stanford

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## Lisa Yamada

Software Developer 2, SoM - CNC - Cracking the Neural Code

### Bio

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#### BIO

Lisa Yamada is a PhD candidate in Electrical Engineering, working with Professor Paul Nuyujukian in the Brain Interfacing Laboratory at Stanford University. She is interested in applying data science and engineering tools for medical applications towards higher quality and more equitable care. As a computational neuroscientist and clinical research coordinator, she is currently investigating quantitative measures for seizure analyses using human neuroelectrophysiology data (e.g., intracortical EEGs of participants with refractory epilepsy). She graduated from Trinity College (Hartford, CT) with BS degrees in Electrical Engineering and Mathematics and earned her MS in Electrical Engineering from Stanford University. In her free time, she enjoys outdoor activities like hiking.

#### HONORS AND AWARDS

- Finalist, The Paul and Daisy Soros Fellowship for New Americans (2017)
- Honorable Mention, National Science Foundation (NSF) Graduate Research Fellowship (2017)
- Awardee, Stanford Electrical Engineering Departmental Fellowship (2015)
- Member, Connecticut Beta of Phi Beta Kappa Honor Society (2015)
- Member, Pi Mu Epsilon Math Honor Society (2015)
- Awardee, Connecticut Space Grant Consortium Senior Project Grant (2014)
- Awardee, Barry Goldwater Scholarship (2014)
- Awardee, Connecticut Space Grant Consortium Undergraduate Directed Campus Scholarship (2013)
- Awardee, Holland Scholarship (2nd ranked student in graduating class) (2012)
- Member, Trinity College Class of 2015 Deans' Scholars (top 25 students in graduating class) (2012)
- Awardee, Josh P. Kupferberg Scholarship (Natural Sciences and Mathematics Award) (2011-2015)

#### EDUCATION AND CERTIFICATIONS

- PhD, Stanford University , Electrical Engineering
- MS, Stanford University , Electrical Engineering (2017)
- BS, Trinity College (Hartford, CT) , Electrical Engineering (2015)
- BS, Trinity College (Hartford, CT) , Mathematics (2015)

## Professional

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### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Member, American Epilepsy Society (2021 - present)
- Member, IEEE (2021 - present)
- Member, IEEE Engineering in Medicine and Biology Society (2021 - present)
- Member, Society for Neuroscience (2020 - present)
- General council member, leader of funding subcommittee, member of advisor-advisee relationship subcommittee, School of Engineering (SoE) Dean's Graduate Student Advisory Council (2019 - present)
- Student Buddy, Stanford Electrical Engineering (2017 - present)
- Member and secretary, Society of Women Engineers (SWE) - Trinity College (2011 - 2015)

## Publications

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### PUBLICATIONS

- **Compression-Enabled Joint Entropy Estimation for Seizure Detection on Human Intracortical Electroencephalography** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*  
Yamada, L., Oskotsky, T., Nuyujukian, P.  
2025; 72 (12): 3440-3452
- **Conserved brain-wide emergence of emotional response from sensory experience in humans and mice.** *Science (New York, N.Y.)*  
Kauvar, I., Richman, E. B., Liu, T. X., Li, C., Vesuna, S., Chibukhchyan, A., Yamada, L., Fogarty, A., Solomon, E., Choi, E. Y., Mortazavi, L., Chau Loo Kung, G., Mukunda, et al  
2025; 388 (6750): eadt3971
- **Ketamine Increases Theta Oscillations and Cortical Connectivity of the Human Hippocampus**  
Solomon, E., Liu, T., Kauvar, I., Vesuna, S., Chibukhchyan, A., Yamada, L., Fogarty, A., Mukunda, P., Patron, K., Nuyujukian, P., Rodriguez, C., Buch, V., Deisseroth, et al  
ELSEVIER SCIENCE INC.2025
- **Classifying High-Frequency Oscillations by Morphologic Contrast to Background, With Surgical Outcome Correlates.** *Journal of clinical neurophysiology : official publication of the American Electroencephalographic Society*  
Qing, K., Von Stein, E., Yamada, L., Fogarty, A., Nuyujukian, P.  
2024
- **A scalable platform for acquisition of high-fidelity human intracranial EEG with minimal clinical burden.** *PloS one*  
Yamada, L., Oskotsky, T., Nuyujukian, P.  
2024; 19 (6): e0305009