MISCHA GUSHIKEN (YURI)

Email: mischagushiken@gmail.com | **Website:** yurigushiken.github.io

Education

Teachers College, Columbia University, New York, NY *May 2023 – May 2025*
Master of Arts in Educational Technology Specialist
GPA: 4.0/4.0
Capstone Portfolio/Integrative Project: Research paper: AI-Enhanced Oral Assessors
Advisor: Prof. Ellen B. Meier
University of California, Davis, Davis, CA *January 2009 - December 2010*
Bachelor of Arts in Political Science
GPA: 3.65/4.0

Research Interests

Infant event representation; Early conceptual structure; Language and concepts; Conceptual change; Numerical cognition; Computational modeling

Research Experience

Language and Cognitive Neuroscience Lab, Teachers College, Columbia University
August 2024 – Present

Research Assistant (PI: Peter Gordon)

- Built reproducible pipelines for infant eye-tracking and numerosity EEG (Python, R, MNE-Python, deep learning).
- Co-designed Eye-Track-ML, an automated gaze-coding system that replaces frame-by-frame manual annotation.
- Designed analyses for "Look Who's Giving" gaze data, showing a developmental shift from motion tracking to relational scanning.
- Built an end-to-end ERP and CNN decoding pipeline for the EEG Numbers study
- Trained lab members on 128-channel EEG setup, data collection, analysis workflows, and GitHub.

Posters and Presentations

Gushiken, M., Li, Y., Tang, J. E., Gordon, P. (March 4 & April 2, 2025). Eye-Track-ML: A Machine Learning Pipeline for Automated Frame-by-Frame Coding of Eye-Tracking Videos.

- Poster presented at the Columbia AI Summit, New York, NY and Columbia Data Science Day, New York, NY.

Tang, J. E., Li, Y., Smith, P., Spitzmueller, J., Gushiken, M. (Yuri), Tobing, C., Gordon, P. (April 1, 2025). Electrophysiological and Behavioral Indices of Numerical Perception and Cognition.

• Poster presented at the Cognitive Neuroscience Society (CNS) Annual Meeting, Boston, MA.

Rhee, V., Chen, Z., Gushiken, M., Bakhru, K., Xu, H., Bisbee, N., Li, Y., Tang, J. E., Gordon, P. (2025). Neurobehavioral Dynamics of Numerical Change: Directional and Numerical Distance Processing.

• Co-author on poster submitted for presentation at the Cognitive Neuroscience Society (CNS) Annual Meeting, Boston, MA (March 29 – April 1, 2026).

Gushiken, M., Li, Y., Tang, J. E., Gordon, P. (2026). Look Who's Giving: Developmental Shift in Attention From Object Movement to the Faces.

• Pending approval, Vision Sciences Society (VSS) 2026 poster abstract.

Teaching & Professional Experience

Teaching Practicum, Teachers College, Columbia University *Fall 2024 – Spring 2025*

Co-taught technology, AI, and computational thinking lessons in K-12 and special education settings.

Service Manager & Head Teacher, Wall Street English & E.C.C. Thailand *2013 – 2023*

Managed, hired, and trained teaching staff. Developed English curriculum for university and corporate clients.

Assistant Language Teacher, JET Programme (Nakijin Board of Education), Okinawa, Japan *2012 – 2013*

Taught English in a public junior high and founded community English course.

Center for American Progress, Washington, D.C., USA *Jan 2010 – Mar 2010*

Executive Intern for President John Podesta.

Awards and Honors

Wall Street English Employee of the Year Award 2021

Dean's List, University of California, Davis (Multiple Quarters)

Skills

Programming: Python (data analysis, MNE-Python, ML), R (statistical analysis), HTML/CSS/JavaScript, React (web-based experiment interfaces)

Methods & Tools: GIS (ArcGIS, QGIS), LATEX (Overleaf), Microsoft AutoGen (AI agents), DaVinci Resolve (video editing), Unity (3D graphics), Git, spec-driven development (GitHub Spec Kit)

Languages: English (Native); Thai (Intermediate–Advanced)

GitHub: github.com/yurigushiken

Professional Affiliations

Member, The Honor Society of Phi Kappa Phi (Inducted 2011)

Member, Cognitive Neuroscience Society (CNS) (Current)