Junghyun (Andy) Kim

Curriculum Vitae / July 17, 2025

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Education

Purdue University, Doctor of Philosophy — Aug. 2024 - Present
- Major in Mathematical and Computational Psychology — Indiana, USA
- Advisor: Anne Sereno

Hanyang University, Master of Science — Mar. 2022 - Feb. 2024
- Major in Cognitive Science (Department of Data Science) — Seoul, South Korea
- Advisor: Sungshin Kim

University of Toronto, Honours Bachelor of Science — Sep. 2015 - Nov. 2021
- Major in Neuroscience — Ontario, Canada
- Major in Psychology
- Minor in Computer Science

Gunagdong Country Garden School, High School — Sep. 2012 - Jun. 2015
- International Baccalaureate (IB) Diploma Programme — Foshan, China

Research Interests

computational cognitive neuroscience, computational modeling, human neuroimaging, vision, decision making, and brain-inspired AI

Research

Sereno Lab — Aug. 2024 - Present
- PI: Anne Sereno — Indiana, USA
- Graduate Research Assistant
  – Conducted fMRI experiments.
  – Trained undergraduate students to run behavior experiments.

Computational Motor Neuroscience Lab — Dec. 2021 - Jul. 2024
- PI: Sungshin Kim — Seoul, South Korea

- Graduate Research Assistant & Lab Manager
  – Proposed original research ideas about de novo motor learning mechanism and connectome-based predictive modeling (CPM).
  – Conducted fMRI and TMS experiments.
  – Performed univariate voxel-wise, univariate surface-based and functional connectivity analyses for publication.
  – Learned other fMRI analysis techniques such as multivariate pattern analysis.
  – Helped the PI writing grant proposals.
  – Mentored other lab members in experimental techniques, fMRI data preprocessing, data analysis and scientific writing.
  – Executed administrative tasks such as managing the lab budget, writing expense documents, organizing experiments, etc.
  – Designed and made the lab website (link).

Toronto Decision Neuroscience Lab Feb. 2021 - Nov. 2021

- PI: Cendri Hutcherson Toronto, Canada
- Undergraduate Research Assistant
  – Joined a project called intention - behavior gap in which I helped making surveys and building experiments using The Experiment Factory (link, link - 'danieljwilson' is the project leader, and 'juhng62' is me).

PUBLICATIONS

Park, S., **Kim, J.**, & Kim, S. (2024). Corticostriatal activity related to performance during continuous de novo motor learning. Scientific Reports, 14(1), 3731. https://doi.org/10.1038/s41598-024-54176-9

Kim, J., Park, S., Yoo, K., & Kim, S. (2024). Double dissociation of visuomotor interaction mediated by visual feedback during continuous de novo motor learning. Communications Biology, 7(1), 1117. https://doi.org/10.1038/s42003-024-06808-z

MANUSCRIPTS UNDER REVIEW AND IN PREPARATION

Park, S., **Kim, J.**, & Kim, S. (in prep). Network-targeted TMS modulates corticostriatal activity during motor skill learning.

CONFERENCE PRESENTATIONS

Kim, J., Yoo, K., & Kim, S. (2023, November 11-15) Whole-brain functional connectome predicts individual differences in learning a motor skill [Poster presentation]. *Society for Neuroscience*

2023, Washington, D.C., USA

Kim, J., Park, S., & Kim, S. (2022, November 12-16) Double dissociations of the effects of visual feedback on motor and somatosensory cortices during visuomotor learning [Poster presentation]. *Society for Neuroscience 2022, San Diego, CA, USA*

Park, S., **Kim, J.**, & Kim, S. (2022, November 12-16) Highly selective striatal response to visual feedback in reward-based motor skill learning [Poster presentation]. *Society for Neuroscience 2022, San Diego, CA, USA*

TEACHING

UG: undergraduate, G: graduate, F: Fall, SP: Spring, SU: Summer, TA: teaching assistant, I: instructor.

All English courses.

Purdue University Indiana, USA

Course Title	Level	Term	Role
PSY201: Introduction to Statistics in Psychology	UG	SU 25	co-I
PSY201: Introduction to Statistics in Psychology	UG	F 24, SP 25, F 25	TA

Hanyang University Seoul, South Korea

Course Title	Level	Term	Role
AIN6017: Cognitive Computational Sciences	G	F 23	TA
SOI2007: Introduction to Cognitive Sciences	UG	F 22, F 23	TA
SOI3006: Computational Cognitive Sciences	UG	SP 23	TA
MAT2017: Probability & Statistics	UG	SP 22, SP 23	TA

SKILLS

	Advanced	Intermediate	Beginner
Languages	Korean, English	Chinese	
Programming	Python, Shell Script	R, MATLAB, Git, LaTeX	C, Docker, SPSS, SQL
NeuroImaging	AFNI, FreeSurfer	FSL	
NeuroStimulation		TMS	
Visualization	Inkscape	MRIcroGL	
Music		Drum	Piano

CERTIFICATES

Certificate of Foundations in College Teaching Mar. 2025

- Purdue University

CPR / AED for Professional Rescuers Nov. 2024 - Oct. 2026

- American Red Cross

VOLUNTEER

Ronald McDonald House Charities Feb. 2016 - Aug. 2018

- 302 hours Centenary Hospital, Toronto, Canada