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ACADEMIC APPOINTMENTS

- July 2025- Assistant Professor, Department of Psychology
Cognition and Cognitive Neuroscience area
University of California, Riverside
- 2021-2025 Postdoctoral Scholar
California Institute of Technology
- Winter 2023 Lecturer in Psychology, part-time
California Institute of Technology

EDUCATION

- 2021 Ph.D. **Princeton University**
Cognitive Psychology and Neuroscience
Advisor: Professor Sabine Kastner
Dissertation: *The neural basis of visuo-spatial attention in school-aged children*
- 2013 B.A. **Yale University**
Cognitive Science
Senior Thesis Advisor: Professor Marcia Johnson

HONORS AND AWARDS

- 2021 – 2023 Della Martin Postdoctoral Fellowship
- 2018 Flux Ambassador Award, Flux Congress (Berlin, Germany)
- 2016 Brains, Minds, and Machines Workshop Fellowship, Marine Biology Laboratory
- 2012 Yale College Dean’s Research Fellowship in the Sciences
- 2012 Sherwood E. Silliman Travel Fellowship
- 2010 Perspectives on Science and Engineering Summer Research Fellowship
- 2009 – 2013 Korea Presidential Honors (full tuition support for undergraduate studies abroad, selected ten students majoring in science and engineering: total amount \$200,000)

PUBLICATIONS

Manuscripts in prep/under review

Wu, Q., **Kim, N. Y.**, & Adolphs, R. (under review) Model-based eye-tracking: a new window to understand individual differences and psychiatric disorders. *Nature Mental Health*. Preprint:

https://doi.org/10.31234/osf.io/mg9n7_v1

Wu, Q.*, **Kim, N. Y.***, Lai, A. K., Keles, U., Outten, B., Paul, L. K. & Adolphs, R. (in prep) Social attention in autism investigated in large samples using webcam-based eye tracking. OSF preregistration: <https://osf.io/sf7wz> * co-first author

Mukherjee, K.*, **Kim, N. Y.***, Alamooti, S. T., Adolphs, R., & Kar, K. (in prep) Closed-loop stimulus selection for autism research using artificial neural networks. * co-first author

Peer-reviewed publications

Wu, Q., Hong, Q., **Kim, N. Y.**, Adolphs, R., Paul, L. K., & Charpentier, C. J. (2025). Variability and stability of autistic traits in the general population: A systematic comparison between online and in-lab samples. *Personality Neuroscience*, 8, e5.

Kim, N. Y., He, J., Wu, Q., Dai, N., Kohlhoff, K., Turner, J., Paul, L. K., Kennedy, D. P., Adolphs, R., Navalpakkam, V. (2024) Smartphone-based gaze estimation for in-home autism research. *Autism Research*, 17 (6), 1140-1148.

Mukherjee, K.*, **Kim, N. Y.***, Alamooti, S. T., Adolphs, R., & Kar, K. (2023) Leveraging artificial neural networks to enhance diagnostic efficiency in autism spectrum disorder: A study on facial emotion recognition. *Conference on Cognitive Computational Neuroscience*.

Kim, N. Y., Pinsk M. A., & Kastner, S. (2021) Neural basis of biased competition in development: Sensory competition in visual cortex of school-aged children. *Cerebral Cortex*, 31(6), 3107-3121.

Hoyos, P. M.*, **Kim, N. Y.***, Cheng, D., Finkelston, A., & Kastner, S. (2020) Development of spatial biases in school-aged children. *Developmental Science*, e13053. * Co-first author

Kim, N. Y. & Kastner, S. (2019) A biased competition theory for the developmental cognitive neuroscience of visuo-spatial attention. *Current Opinion in Psychology*, 29, 219-228.

Engell, A. D., **Kim, N. Y.**, & McCarthy, G. (2018) Sensitivity to faces with typical and atypical part configurations within regions of the face-processing network: An fMRI study. *Journal of Cognitive Neuroscience*, 30:7, 963-972.

Kim, N. Y. & McCarthy, G. (2016) Task-relevant effects on pattern discriminability between faces and bodies in the fusiform gyrus. *Social Neuroscience*, 0919, 1-10.

Kim, N. Y., Lee, S. M., Erlendsdottir, M., & McCarthy, G. (2014) Discriminable spatial patterns of activation for faces and bodies in the fusiform gyrus. *Frontiers in Human Neuroscience*, 8, 1-12.

Outreach articles

Hoyos, P. M., **Kim, N. Y.**, & Kastner, S. (2022) Left or Right? How Attention and Reading Develop Together. *Frontiers for Young Minds*, 10:734161.

Hoyos, P. M., **Kim, N. Y.**, & Kastner, S. (2019) How is magnetic resonance imaging used to learn about the brain? *Frontiers for Young Minds*, 7:86.

CONFERENCE PRESENTATIONS (selected)

Wu, Q., Kim, N. Y., Outten, B., Barbano, A., Paul, L. K., & Adolphs, R. (2025) Feature-based modeling of visual attention in autism: a large-scale online eye-tracking study. Poster presented at the *Conference on Cognitive Computational Neuroscience*, Amsterdam, Netherlands.

Kim, N. Y., Wu, Q., Outten, B., Barbano, A., Paul, L. K., & Adolphs, R. (2024) Differential gaze patterns in autism while watching video conversations: An online eye-tracking study. Accepted as an oral presentation at *International Society for Autism Research Annual Meeting*, Melbourne, Australia.

Kim, N. Y., Mukherjee, K., Alamooti, S. T., Adolphs, R., & Kar, K. (2023) Leveraging artificial neural networks to enhance diagnostic efficiency in autism spectrum disorder: A study on facial emotion recognition. Poster presented at the *Centre for Vision Research conference*, Toronto, Canada.

Mukherjee, K., **Kim, N. Y.**, Alamooti, S. T., Adolphs, R., & Kar, K. (2023) Leveraging artificial neural networks to enhance diagnostic efficiency in autism spectrum disorder: A study on facial emotion recognition. Talk and poster presented at the *Conference on Cognitive Computational Neuroscience*, Oxford, U.K.

Kim, N. Y., He, J., Dai, N., [...], Kennedy, D. P., Adolphs, R., & Navalpakkam, V. (2023) Smartphone-based eye tracking for longitudinal studies of autism. Poster presented at *International Society for Autism Research Annual Meeting*, Stockholm, Sweden.

Wu, Q., **Kim, N. Y.**, Turner, J., Keles, U., Paul, L. K., Bzdok, D., & Adolphs, R. (2023) Modeling Eye Gaze to Videos Using Dynamic Trajectory Variability Analysis. Poster presented at *Society of Biological Psychiatry Annual Meeting*, San Diego, CA.

Kim, N. Y., Wu, Q., Keles, U., Paul, L. K., & Adolphs, R. (2022) Probing individual differences in visual attention and autism traits: A large-scale online eye-tracking study. Poster presented at *Flux Congress: International Society for Developmental Cognitive Neuroscience*.

Kim, N. Y., Hoyos, P. M., & Kastner, S. (2020) Searching for a neuromarker of spatial attention bias in school-aged children. Interactive talk presented at *NeuroMatch 3.0 Virtual*: <https://youtu.be/GiDa8BhfBzs>.

Kim, N. Y., Hoyos, P. M., & Kastner, S. (2020) Searching for a neuromarker of spatial attention bias in school-aged children. Poster presented at *Flux Congress: International Society for Developmental Cognitive Neuroscience (Virtual)*.

Hoyos, P. M., **Kim, N. Y.**, Igelström, K., Pecsok, M., Pinsk M. A., & Kastner, S. (2019) Establishing a neural basis for the high frequency of comorbidity amongst RD, ADHD, and DCD. Poster presented at *Flux Congress: International Society for Developmental Cognitive Neuroscience*, New York City, NY.

Kim, N. Y., Pinsk M. A., & Kastner, S. (2019) Neural basis of biased competition in development: Sensory suppression in visual cortex of school-aged children. Poster presented at *Flux Congress: International Society for Developmental Cognitive Neuroscience*, New York City, NY.

Kim, N. Y., Pinsk M. A., & Kastner, S. (2018) Development of sensory competition in the visual cortex: An fMRI study in school aged children. Poster presented at *Flux Congress: International Society for Developmental Cognitive Neuroscience*, Berlin, Germany.

TEACHING AND ADVISING

California Institute of Technology

Postdoctoral Lecturer (designed and taught a new course as the Instructor of Record)

PSY 101: Selected Topics in Psychology – The Life Cycle of Behaviors, Winter 2023

Princeton University

Head Lab Instructor

PSY 101: Introduction to Psychology, Fall 2019

Teaching Assistantship

PSY 251: Quantitative Methods, Preceptor, Spring 2019

PSY/NEU 260: The Life Cycle of Behaviors, Preceptor, Spring 2018

PSY 345/NEU 325: Sensation and Perception, Preceptor, Fall 2017

PSY 101: Introduction to Psychology, Lab Instructor, Fall 2016

Guest Lectures

PSY 101: Introduction to Psychology (Title: Conditioning and Learning, Behaviorism), Fall 2019

PSY/NEU 260: The Life Cycle of Behaviors (Title: Child Development), Spring 2018

Mentorship

Ava Barbano, Undergraduate summer research student (Caltech SURF), Caltech

Qianhui Hong, Undergraduate summer research student (Caltech SURF) & Simons Foundation

Undergraduate Research Fellowship, Caltech

Audrey Lai, Undergraduate summer research student (Caltech SURF), UCLA

Carla Adrianna Luna, Undergraduate summer research student (Caltech WAVE Program), University of Pennsylvania

Patricia Hoyos, Undergraduate senior thesis project and full-time research assistant, Princeton University

Debby Cheng, Undergraduate senior thesis project, Princeton University

Maggie Pecsok, Undergraduate senior thesis project, Princeton University

Abby Finkelston, Undergraduate senior thesis project, Princeton University

Heirangi Torrico-Teave, Undergraduate summer research student, Princeton University

Irene Jiang, Undergraduate summer research student, Yale University

Nicole Minkina, Undergraduate summer research student, Yale University

PROFESSIONAL SERVICE AND ACTIVITIES

Ad hoc reviews

Attention, Perception, & Psychophysics, Autism Research, Current Biology, Communications Psychology

Society committees

2019 – 2021 Flux Trainee Committee

University and departmental committees

2022 Poster Presentation Judge at Caltech Undergraduate Summer Research Day (SURF)

2016 – 2017 Princeton Psychology Social Hour Organizer

2016 Princeton Psychology Visiting Day for Prospective Graduate Students

—Cognitive Area Organizer

COMMUNITY OUTREACH

2022 City of STEM Exhibitor, Downey CA
2020 North Star Academy Washington Park High School Career Fair, Newark NJ
2020 Jose Marti STEM Academy, Union City NJ
2018 – 2019 Littlebrook Elementary School Science Expo Presenter, Princeton NJ
2018 Hopewell Elementary School Science Fair Judge, Hopewell NJ
2016, 2018 Young Women’s Conference in STEM Exhibitor, Princeton NJ
2016 – 2020 Princeton Communiversitity Exhibitor, Princeton NJ