Jeesung Ahn

Psychologist | Neuroscientist | Health Researcher

Department of Psychology, University of Pennsylvania, Philadelphia, PA, USA

✉ jeesung@sas.upenn.edu | 🏠 jeesung-ahn.github.io | 🔗 jeesung-ahn | 💼 jeesung-ahn

EDUCATION

Ph.D. Candidate in Psychology, University of Pennsylvania *Aug. 2019 - expected May 2024*

Communication Neuroscience Lab (Advisor: Emily Falk, Ph.D.), Department of Psychology *Philadelphia, PA, USA*

- Dissertation Committee: Dr. Anna Jenkins, Dr. Danielle Bassett, Dr. Emily Falk

M.A. in Psychology, University of Pennsylvania *Aug. 2019 - Aug. 2021*

Communication Neuroscience Lab (Advisor: Emily Falk, Ph.D.), Department of Psychology *Philadelphia, PA, USA*

- Thesis: Effects of message framing on neural responses to persuasive message and health behavior change

M.S. in Cognitive Science and Engineering, Yonsei University *Mar. 2016 - Feb. 2018*

Applied Brain Cognition Lab (Advisor: Sanghoon Han, Ph.D.), Interdepartmental Cognitive Science Program *Seoul, South Korea*

- Thesis: Voxel-wise mapping of functional magnetic resonance imaging in impression formation (best thesis award)

B.A. in Psychology & B.S. in Brain and Cognitive Sciences, Korea University *Mar. 2011 - Aug. 2015*

Department of Psychology, College of Information and Communications *Seoul, South Korea*

Exchange Student Program, Macquarie University *July 2013 - Dec. 2013*

Department of Psychology *Sydney, Australia*

ACADEMIC POSITIONS

Doctoral Researcher *Aug. 2019 – Present*

Communication Neuroscience Lab, Department of Psychology, University of Pennsylvania *Philadelphia, PA, USA*

- Led 8+ multidisciplinary research projects in the fields of health psychology and neuroscience (research focus: health persuasion, health interventions, health behavior change, mental well-being, loneliness, social connections, brain networks, predictive modeling)
- Collaborated with cross-functional teams of 70+ researchers from 10+ institutions; skilled at effectively visualizing and communicating complex scientific findings to diverse audiences
- Developed a lab-wide data processing pipeline for the streamlined analysis and visualization of complex multi-dimensional datasets (61TB), now actively used by global collaborators in 3+ countries

Teaching Assistant *Jan. 2021 – Dec. 2021*

Department of Psychology, University of Pennsylvania *Philadelphia, PA, USA*

- Mentored 100+ undergraduates in developing effective study strategies during the challenging times of COVID-19
- Created evaluation tools, graded student essays, and provided constructive feedback
- Introduction to Experimental Psychology (Spring 2021, Rebecca Waller, Ph.D.; Fall 2021, Anna Jenkins, Ph.D.)

Research Associate *April 2015 – Mar. 2019*

Applied Brain Cognition Lab, Yonsei University & Integrated Neurocognitive Functional Imaging Center, Yonsei University Severance Hospital *Seoul, South Korea*

- Designed and directed 7+ end-to-end behavioral and neuroimaging projects, resulting in 3 first-author publications, an award-winning Master's thesis, and 6 international conference presentations
- Collaborated with cross-functional teams to develop a mobile application for treating social anxiety; conducted behavioral and neuroimaging experiments, in-depth interviews, and supervised machine learning analyses to evaluate user experience and clinical efficacy
- Mentored junior researchers in project management, neuroimaging analyses, data quality control, and MATLAB scripting

Research Coordinator *Jun. 2017 – Feb. 2018*

Brain Korea 21+, National Research Foundation of Korea *Seoul, South Korea*

- Managed research and travel funds for Yonsei Applied Brain Cognition Lab, ensuring the smooth operation of multiple ongoing projects
- Constructed lab's annual review reports, highlighting significant achievements and future directions

Research Coordinator *Mar. 2016 – Aug. 2016*

Institute of Human Behavior, Yonsei University *Seoul, South Korea*

- Organized academic social events (e.g., guest speaker series), building collaboration and community within Yonsei psychology department

Research Assistant *Nov. 2014 – April 2015*

Laboratory of Social Decision Neuroscience, Korea University (Advisor: Hackjin Kim, Ph.D.) *Seoul, South Korea*

- Collected behavioral and neuroimaging data for an EEG hyperscanning experiment that investigated the neural mechanisms of teamwork

PUBLICATIONS

Ahn, J., Falk, E. B., & Kang, Y. (2023). Relationships between physical activity and loneliness: A systematic review of intervention studies. *In Press, Current Research in Behavioral Sciences*.

Cosme, D., Helion, C., Kang, Y., Lydon-Staley, D. M., Doré, B. P., Stanoi, O., **Ahn, J.**, Jovanova, M., McGowan, A. L., Kober, H., Mucha, P. J., Bassett, D. S., Ochsner, K. N., & Falk, E. B. (2023). Mindful attention to alcohol can reduce cravings in the moment and consumption in daily life. *PsyArXiv*. `https://osf.io/preprints/psyarxiv/7j4ey/`

Kang, Y., **Ahn, J.**, Cosme, D., McGowan, A., Mwilambwe-Tshilobo, L., Zhou, D., Jovanova, M., Stanoi, O., Mucha, P., Ochsner, K., Bassett, D., Lydon-Staley, D., & Falk, E. (2023). Frontoparietal functional connectivity moderates the link between time spent on social media and subsequent negative affect. *Scientific Reports*. `https://doi.org/10.1038/s41598-023-46040-z`

Zhou, D., Kang, Y., Cosme, D., Jovanova, M., He, X., Mahadevan, A., **Ahn, J.**, Stanoi, O., Brynildsen, J. K., Cooper, N., Cornblath, E. J., Parkes, L., Mucha, P. J., Ochsner, K. N., Lydon-Staley, D. M., Falk, E. B., & Bassett, D. S. (2023). Mindful attention promotes control of brain network dynamics for self-regulation and discontinues the past from the present. *PNAS*, *120*(2). `https://doi.org/10.1073/pnas.2201074119`

Ahn, J., Nah, Y., Ko, I., & Han, S. (2022). Voxel-wise Mapping of Functional Magnetic Resonance Imaging in Impression Formation. *Korean Society for Emotion and Sensibility*, *25*(4), 77–94. `https://doi.org/10.14695/KJSOS.2022.25.4.77`

Kang, Y., Cosme, D., Lydon-Staley, D., **Ahn, J.**, Jovanova, M., Corbani, F., Lomax, S., Stanoi, O., Strecher, V., Mucha, P. J., Ochsner, K., Bassett, D. S., & Falk, E. B. (2022). Purpose in life, neural alcohol cue reactivity and daily alcohol use in social drinkers. *Addiction*, *117*(12), 3049–3057. `https://doi.org/10.1111/add.16012`

Cosme, D., Kang, Y., Tartak, J. C., **Ahn, J.**, Corbani, F. E., Cooper, N., Doré, B., He, X., Helion, C., Jovanova, M., Lomax, S., Mahadevan, A., McGowan, A. L., Paul, A., Pei, R., Resnick, A., Stanoi, O., Zhang, T., Zhang, Y., … Falk, E. B. (2022). Study protocol: Social Health Impact of Network Effects (SHINE) Study. *PsyArXiv*. `https://doi.org/10.31234/osf.io/cj2nx`

Ahn, J., Lee, J., Han, J. H., Kang, M. S., & Han, S. (2018). Group analysis data representing the effects of frontopolar transcranial direct current stimulation on the default mode network. *Data in Brief*, *20*, 1309–1313. `https://doi.org/10.1016/j.dib.2018.08.164`

Ahn, J., Kim, H., Park, J., & Han, S. (2018). Interactivity of Neural Representations for Perceiving Shared Social Memory. *Korean Society for Emotion and Sensibility*, *21*(3), 29–48. `https://doi.org/10.14695/KJSOS.2018.21.3.29`

WORKING PAPERS

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2023). Effects of framing on neural responses to persuasive messaging and physical activity. *Under Review*.

Ahn, J., Cosme, D., Kang, Y., Zachary, B., Ochsner, K., Mucha, P., Lydon-Staley, D., Bassett, D. S., & Falk, E. B. (2023). Segregation and integration of brain functional connectivity networks moderate craving-drinking relationships in daily life. *In Prep*.

Ahn, J., Kang, Y., Mwilambwe-Tshilobo, L., Cosme, D., Bassett, D. S., Zachary, B., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. B. (2023). Neural responses to peer faces predict loneliness in college students. *In Prep*.

Ahn, J., Mwilambwe-Tshilobo, L., Kang, Y., Cosme, D., Bassett, D. S., Zachary, B., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. B. (2023). Connectome-based predictive modeling of loneliness during COVID-19. *In Prep*.

Ahn, J., Mwilambwe-Tshilobo, L., Kang, Y., Cosme, D., Bassett, D. S., Zachary, B., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. B. (2023). Inaccurate self-evaluations, well-being, and mentalizing activity in the brain. *In Prep*.

Ahn, J., Zhou, D., Falk, E. B., Bassett, D. S., & Ruscio, A. (2023). Brain network dynamics predicting perseverance thoughts in clinical populations. *In Prep (Ahn & Zhou Co-First Authorship)*.

PRESENTATIONS

Invited Talks

Mwilambwe-Tshilobo, L., **Ahn, J.**, Kang, Y., Stanoi, O., Speer, S., Tamir, D., Boyd, Z., Bassett, D., Ochsner, K., Lydon-Staley, D., Mucha, P., & Falk, E. (2023, April). Loneliness and functional brain connectivity through the lens of social networks. *Social and Affective Neuroscience Society 2023 Annual Conference, Santa Barbara, USA.*

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2022, May). Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors. *Social and Affective Neuroscience Society 2022 Annual Conference, Virtual.*

Ahn, J., Richards, K., & Ortiz, T. (2021, April). Recommendations for an intelligent diet. *Wharton Data Science Live 2021, Virtual.* event-place: Virtual Conference

Conference Poster Presentations

Ahn, J., Kang, Y., Mwilambwe-Tshilobo, L., Bassett, D., Boyd, Z., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. (2023, May). Neural responses to peers' faces predict vulnerability to loneliness during COVID-19. *Annual International Communication Association Conference 2023, Toronto, Canada.*

Jovanova, M., Boyd, Z., Schwarze, A., Christensen, T., Cosme, D., Katch, K., **Ahn, J.**, Resnick, A., Cooper, N., Xie, H., Kang, Y., Lomax, S., McGowan, A., Mwilambwe-Tshilobo, L., Stanoi, O., Srivastava, P., Ochsner, K., Bassett, D., Lydon-Staley, D., … Mucha, P. (2023, May). Integrating multimodal data and machine learning to predict individual differences in health behavior change. *Annual International Communication Association Conference 2023, Toronto, Canada.*

Kang, Y., **Ahn, J.**, Cosme, D., McGowan, A., Mwilambwe-Tshilobo, L., Zhou, D., Jovanova, M., Stanoi, O., Mucha, P., Ochsner, K., Bassett, D., Lydon-Staley, D., & Falk, E. (2023, May). Frontoparietal functional connectivity moderates the link between time spent on social media and subsequent negative affect. *Annual International Communication Association Conference 2023, Toronto, Canada (Promising Paper Award Winner).*

Ahn, J., Kang, Y., Mwilambwe-Tshilobo, L., Cosme, D., Jovanova, M., Bassett, D., Boyd, Z., Lydon-Staley, D., Mucha, P., Ochsner, K., & Falk, E. (2023, April). Neural responses to peers' faces predict vulnerability to loneliness during COVID-19. *Social and Affective Neuroscience Society 2023 Annual Conference, Santa Barbara, CA, USA.*

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2022, May). Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors. *Social and Affective Neuroscience Society 2022 Annual Conference, Virtual (Top Poster Award Winner).*

Ahn, J., Cooper, N., Kang, Y., O'Donnell, M., Green, M., Samanez-Larkin, G., & Falk, E. B. (2022, May). Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors. *Annual International Communication Association Conference 2022, Paris, France.*

Chan, H.-Y., Scholz, C., Cosme, D., Martin, R., Benitez, C., Cooper, N., Paul, A., **Ahn, J.**, Doré, B., Resnick, A., Carreras-Tartak, J., & Falk, E. B. (2022, May). Brain-based prediction of information virality: Evidence of cross-cultural validity from a pre-registered neuroimaging study. *Annual International Communication Association Conference 2022, Paris, France.*

Cosme, D., Scholz, C., Chan, H.-Y., Martin, R., Cooper, N., Paul, A., **Ahn, J.**, Doré, B., Resnick, A., Carreras-Tartak, J., & Falk, E. B. (2022, May). Does focusing on self or social relevance during news article exposure increase motivation to share content? *Annual International Communication Association Conference 2022, Paris, France.*

Ahn, J., Jun, S., Lee, J., Min, S., Lee, S.-K., Park, S. H., & Han, S. (2018, November). Altered emotional attention and brain functional connectivity networks of emotional laborers. *Society for Neuroscience 2018 Annual Conference, San Diego, CA, USA.*

Min, S., Jun, S., **Ahn, J.**, Lee, J., Lee, S.-K., Park, S. H., & Han, S. (2018, November). Intrinsic functional connectivity in emotion regulation network is altered in emotion laborers. *Society for Neuroscience 2018 Annual Conference, San Diego, USA.*

Lee, J., Lee, H. J., **Ahn, J.**, Lee, S.-K., & Han, S. (2018, June). Exploring the high-resolution EPI fMRI protocol to reduce susceptibility-related BOLD signal dropout. *The Organization for Human Brain Mapping 2018 Annual Meeting, Singapore*.

Ahn, J., Han, J. H., Kang, M. S., & Han, S. (2017, November). Frontopolar transcranial direct current stimulation changes intrinsic functional connectivity networks during resting-state fMRI. *Society for Neuroscience 2017 Annual Conference, Washington DC, USA*.

Ahn, J., Nah, Y., & Han, S. (2016, November). Voxel-wise mapping of the cingulate cortex in impression formation. *Society for Neuroscience 2016 Annual Conference, San Diego, CA, USA*.

Ahn, J., Nah, Y., & Han, S. (2016, April). Patterns of functional connectivity during preparation periods can predict the tendency to give up in following decision-making. *Cognitive Neuroscience Society 2016 Annual Conference, New York City, NY, USA*.

VOLUNTEER ACTIVITIES & OUTREACH

Vice President of Consulting
May 2023 – Present

PENN GRADUATE CONSULTING CLUB
Philadelphia, PA, USA

- Managed 6 project managers and 30+ analysts for successful execution of pro bono consulting projects
- Established strong relationships with 5+ industry clients within the first 2 months of joining the board, doubling the number of pro bono consulting projects secured compared to the previous year
- Revamped marketing strategies to recruit talented team members, increasing project member applications by 300%
- Initiated structured training sessions for 30+ project managers and analysts on client expectations, high-quality deliverables, and presentations

Consultant
Sept. 2022 – Jan. 2023

PENN BIOTECH GROUP HEALTHCARE CONSULTING
Philadelphia, PA, USA

- Presented weekly deliverables to the CEOs of a biotechnology start-up as part of an 11-person graduate research team
- Evaluated 200+ company profiles and clinical trial data, identifying 4 partnership opportunities with the highest synergistic potential
- Interviewed 10 key opinion leaders in healthcare (e.g., physicians), synthesizing their insights into clear recommendations on clinical trial design
- Recognized for exceptional contributions and recruited as Vice President of Consulting by Penn Graduate Consulting Club

Data Scientist
Mar. 2022 – Mar. 2023

DIVERSITY AND EQUITY INITIATIVE IN MIND SCIENCES
Philadelphia, PA, USA

- Designed online surveys to assess the effectiveness of education outreach programs
- Visualized program outcomes using R (e.g., text-analyzed participant feedback) and delivered actionable insights to program organizers to enhance the overall participant experience

Data Scientist
Feb. 2022 – May 2022

PENN DATA SCIENCE GROUP
Philadelphia, PA, USA

- Synthesized air pollution and health data procured from 6 sources (100K+ data points) into an interactive heat map

UX Research Consultant
Mar. 2016 – Feb. 2018

TEAM QUANTUMLABS (START-UP)
Seoul, South Korea

- Directed research projects (A/B testing, surveys, lab experiments, and interviews) to assess user behavior and guide strategic product decisions for a novel neurostimulation device
- Communicated award-winning scientific insights with cross-functional stakeholders (venture capital funders, designers, engineers, and clinicians), acquiring $100K+ in funding

INTERNSHIPS

Healthcare Platform Data Strategy Intern
July 2023

SAMSUNG LIFE INSURANCE
Seoul, South Korea

- Analyzed behavioral patterns and health conditions of mobile healthcare app users (200K+ data points) and provided actionable recommendations on UI/UX design, data collection, and analytic strategies for effective user acquisition and retention

Summer Intern
July 2014 – Aug. 2014

KB KOOKMIN BANK
Seoul, South Korea

- Received training in managing customer financial data and improving customer journeys at South Korea's largest commercial bank

Student Intern
Sep. 2013 – Dec. 2013

KOREAN CULTURAL CENTER, AUSTRALIA
Sydney, Australia

- Interfaced with customers visiting the center as a primary receptionist and provided translation services between English and Korean
- Monitored Korea-related media content broadcasted in Australia
- Organized cultural events, including K-pop dance and Korean speech contests

SCHOLARSHIPS

Penn Full-Ride Doctoral Fellowship ($400K)   *2019 - Present*
SCHOOL OF ARTS AND SCIENCES, UNIVERSITY OF PENNSYLVANIA

Kwanjeong Full-Tuition Graudate Scholarship ($22K)   *2016 - 2017*
KWANJEONG EDUCATIONAL FOUNDATION   *http://en.ikef.or.kr*

Brain Korea 21+ Graduate Scholarship   *2016 - 2017*
NATIONAL RESEARCH FOUNDATION OF KOREA

HONORS & AWARDS

Comcast Applied AI Award   *2023*
PHILLY CODEFEST

- Managed a team of 2 software engineers to solve an AR/AI technology problem presented by Comcast; Came first place among 50+ teams
- Invited to present the solution to Comcast's CTO at its headquarters

Top Poster Award   *2022*
SOCIAL AFFECTIVE NEUROSCIENCE SOCIETY

- Presented findings at an invited talk titled "Brain responses to gain- and loss-framed messages differ, and interact with baseline physical activity, to predict later behaviors"; Awarded among 300+ attendees

Best Master's Thesis Award   *2018*
YONSEI UNIVERSITY GRADUATE GROUP

- For the thesis titled "Voxel-wise mapping of functional magnetic resonance imaging in impression formation"; Awarded among 1K+ theses across 91 departments

Interdisciplinary Research Initiative Award, Grand Prize   *2017*
INSTITUTE OF CONVERGENCE SCIENCE (ICONS)

- Collaborated with 3 electrical engineers to enhance medical image resolution using deep learning algorithms; Awarded $5K in research funding

Start-up Challenge Award   *2016*
YONSEI ENTERPRISE SUPPORT FOUNDATION

- Presented A/B test findings for a novel neurostimulation device developed by a start-up; Awarded $1K and office space; Led to $100K venture capital funding

Dean's Honors   *2011, 2013, 2014*
DEPARTMENT OF PSYCHOLOGY, COLLEGE OF INFORMATION & COMMUNICATIONS, KOREA UNIVERSITY

- For 5 out of 7 semesters; 2014, Fall Semester (GPA 4.25/4.5); 2014, Spring Semester (GPA 4.25/4.5); 2013, Spring Semester (GPA 4.0/4.5); 2011, Fall Semester (GPA 4.11/4.5); 2011, Spring Semester (GPA 4.37/4.5)