Chihye Han (Kelsey)

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Education

Johns Hopkins University — Baltimore, MD
Ph.D. in Cognitive Science — Aug 2020–Present
Computational Cognitive Science Track
PI: Michael F. Bonner

Korea Advanced Institute of Science and Technology — Daejeon, Korea
M.S. in Electrical Engineering — Sep 2017–Sep 2019
PI: Daeshik Kim

Carleton College — Northfield, MN
B.A. in Cognitive Science — Sep 2009–June 2013
Neuroscience concentration
PIs: Kathleen G. Galotti, Roy Eleveton

Publications

Chihye Han, Caterina Magri, Michael Bonner, "Quantifying the latent semantic content of visual representations," *Journal of Vision*, Accepted (abstract only).

Geondo Park, **Chihye Han**, Wonjun Yoon, Daeshik Kim, "MHSAN: Multi-Head Self-Attention Network for Visual Semantic Embedding," *IEEE Winter Conference on Applications of Computer Vision (WACV 2020)* [paper]

Chihye Han, Wonjun Yoon, Gihyun Kwon, Seungkyu Nam, Daeshik Kim, "Representation of White- and Black-Box Adversarial Examples in Deep Neural Networks and Humans: A Functional Magnetic Resonance Imaging Study," *Proceedings of the International Joint Conference on Neural Networks (IJCNN), 2019* [paper]

Gihyun Kwon, **Chihye Han**, Daeshik Kim, "Generation of 3D Brain MRI Using Auto-Encoding Generative Adversarial Networks," *International Conference On Medical Image Computing & Computer Assisted Intervention (MICCAI)* [paper]

Jaeki Hong, Liang Li, **Chihye Han**, Bingxu Jin, Qichao Yang, Zilong Yang, "Optimizing Hadoop Framework for Solid State Drives," *Proceedings of IEEE International Congress on Big Data (BigData Congress), 2016* [paper]

Conference posters

Chihye Han, Caterina Magri, Michael Bonner, "Quantifying the latent semantic content of visual representations," *Vision Sciences Society (VSS 2021)*, Virtual.

Chihye Han, Wonjun Yoon, Seungkyu Nam, Daeshik Kim, "Neural Representation of Adversarial Images: An fMRI Study," *13th Women in Machine Learning Workshop*, Montreal, Canada

Jisuk Park, **Chihye Han**, Minseon Kim, Daeshik Kim, "End-to-End rs-fMRI Data Classification Using Deep Convolutional and Long Short- Term Memory Networks", *Organization for Human Brain Mapping 2018*, Singapore

Minseon Kim, **Chihye Han**, Jisuk Park, Daeshik Kim, "T1 Image Synthesis with Deep Convolutional Generative Adversarial Networks", *Organization for Human Brain Mapping 2018*, Singapore

Jisuk Park, **Chihye Han**, Sun Mi Park, Seungkyu Nam, Dae-Shik Kim, "Gender and age classification based on Long Short-Term Memory during resting state fMRI," *Society for Neuroscience Annual Meeting (SfN) 2017*, Washington DC, USA

Experience

Research Intern, KAIST Jan–May 2020
Context consistency for audio-visual scene memory [osf]
PI: Sang Ah Lee

Analysis Engineer, OBELAB Inc. Jan–May 2017
fNIRS data analysis and analysis software development

Software Engineer, Samsung Electronics Feb 2014–April 2016
Optimization of the Hadoop framework for solid state drives
Solid state drive-based genome analysis solution
PI: Wooseok Chang

Honors

Elseveir/*Vision Research* Travel Award (VSS) 2021

National Scholarship (KAIST) 2017–2019

Travel Grant (IEEE International Joint Conference of Neural Networks) 2019

Travel Grant (Women in Machine Learning) 2018

Best Paper Award (IEEE International Congree on Big Data) 2016

Value Creator Award (Samsung Human Resources Development Center) 2014

Sixma Xi Nomination (Carleton College) 2012

Robert J. Kolenkow and Robert A. Reitz Fund for Undergraduate Research (Carleton College) 2010

Invited talks

Chihye Han. Representation of Adversarial Examples in Deep Neural Networks and Humans.

- Invited talk at Cognitive Science Open Talk at PsyGrammar, Sep 2019.
- Guest lecture for EE635: Functional Neuroimaging at KAIST, Oct 2019.

Teaching

Teaching Assistant, Cognitive Neuroscience (JHU)	Spring 2021
Teaching Assistant, Electronics Design Lab (KAIST)	Spring 2019
Teaching Assistant, Neural Networks (KAIST)	Fall 2018
Teaching Assistant, Music Theory I & II (Carleton College)	Fall–Winter 2012

Skills

Python, MATLAB, PyTorch, Bash shell scripting (proficient)
Java, C, Perl, LaTeX, HTML (basic)
Functional Neuroimaging: fMRI, fNIRS, SPM, PsychoPy, SPSS

Professional memberships

IEEE, Society for Neuroscience, Vision Sciences Society