

Alireza Kazemi

CENTER FOR MIND AND BRAIN

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Education

Expected 2024	Ph.D Candidate, Developmental and Cognitive Psychology <i>University of California Davis</i>
2020	M.A., Developmental and Cognitive Psychology <i>University of California Davis</i>
2014	M.Sc., Biomedical Engineering <i>Univesity of Tehran</i>
2011	B.Sc., Electronic Engineering <i>University of Shahid Beheshti</i>

Positions

2017-Present	Graduate Student Researcher <i>University of California, Davis, Prof. Ghetti's Lab</i>
2017-Present	Teaching Assistant <i>16 quarters for PSC001, PSC100, PSC140, PSC141, PSC141Y, PSC146 at UC Davis, Department of Psychology</i>
2014-2017	Researcher <i>NR Sign Inc., R&D</i>
2011-2012	Graduate Student Researcher <i>University of Tehran, Prof. Setarehdan's Lab</i>
2011 Feb.-Dec.	Technical Advisor <i>Padra Trading and Technology Ltd., Laboratory Instrumentation</i>
2010 Jul.-Dec.	Technical assistant (as Trainee) <i>Tehran Securities Exchange Technology Management Co.</i>
2008-2011	Teaching Assistant <i>Shahid Beheshti University, Electrical Engineering Department</i>

Publications

- Kazemi, A., Coughlin, C., DeMaster, D., & Ghetti, S., (2022), Contextual Features in the Developing Hippocampus: A Representational Similarity Analysis. *Hippocampus* 1-12, DOI
- Kazemi, A., McKeown, J.M., & Mirian, M.S., (2022), Sleep Staging Using Semi-Unsupervised Clustering of EEG: application to REM Sleep Behavior Disorder. *Biomedical Signal Processing and Control*, 75, DOI
- Kazemi, A., Mirian, M.S., & McKeown, J.M., (2021), Galvanic vestibular stimulation effects on EEG biomarkers of motor vigor in Parkinson's disease. *Frontiers in neurology*, 12, DOI
- Selmezy, D., Kazemi, A., & Ghetti, S., (2021), Developmental Differences in Subjective Recollection and its Role in Decision Making *Child Development*, 92 (6), DOI
- Casciola, A.A., Carlucci, S.K., Kent, B.A., Punch, A.M., Muszynski, M.A., Zhou, D., Kazemi, A., Mirian, M.S., Valerio, J., Mckeown, M.J., & Nygaard, H.B., (2021), A Deep Learning Strategy for Automatic Sleep Staging Based on Two-Channel EEG Headband Data. *Sensors*, 21 (10), DOI
- Leckey, S., Selmezy, D., Kazemi, A., Johnson, E., Hembacher, E., & Ghetti, S., (2020), Response latencies and eye gaze provide insight on how toddlers gather evidence under uncertainty. *Nature Human Behaviour*, 4(9), DOI

Bastany, Z. J., Askari, S., Dumont, G. A., Kellinghaus, C., **Kazemi, A.**, & Gorji, A., (2020), Association of cortical spreading depression and seizures in patients with medically intractable epilepsy. *Clinical Neurophysiology*. 131(12), DOI

Yaghouti, M., Sharifi, M.J., & **Kazemi, A.** (2013), Optimal spin-state transition in singly occupied quantum dots network. *Journal of Applied Physics*, 113(2), DOI

Presentations

Mirian, M.S., **Kazemi, A.**, Hussain R., Lee S., Verchere, W.D., Ward, R.K. & McKeown, M., Galvanic Vestibular Stimulation effects on LSTM-based EEG neuro-markers of Motor Vigor in Parkinson's Disease. Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation (November, 2021)

Kazemi, A., & Ghetti, S., Representational Similarity Analysis Reveals Development of Contextual Binding Along the Anterior-Posterior Axis of the Hippocampus. Society for Research in Child Development. (April, 2021). Virtual.

Selmechy, D., **Kazemi, A.**, & Ghetti, S., "Should I ask for help?": How children weigh their confidence and available evidence. Cognitive Development Society. (October, 2019). Louisville, KY.

Selmechy, D., **Kazemi, A.**, & Ghetti, S., "Should I use your hint?" How children integrate hints into their memory decisions. Society for Research in Child Development. (March, 2019). Baltimore, MD.

Methods Developed

- _ Representational similarity analysis on temporal and spatial gaze-patterns
- _ Representational similarity analysis on the time-course voxel-wise activations for SPM 12 outputs.
- _ Semiunsupervised automatic sleep staging method applicable for clinical population.
- _ Online sleepiness index estimation for the purpose of biofeedback using single channel EEG signal based on higher order statistical analysis
- _ Fetal ECG extraction from abdominal signals.
- _ Automatic Tuberculosis Bacilli segmentation in microscopic pictures using morphological methods.
- _ Automatic detection of dangerous driving pattern in highways using distributed artificial intelligence approach.

Patents

Anxiety Remover, Sedative and Sleeping Smart Device

Owner: *Alireza Kazemi*

Patents Of Iran

Patent Number: 1394/02/13 - 85581

2015

Certificates

Quantitative Neuro-microscopical Course

3-Day Workshop

From: *Aarhus University & Shahid Beheshti University*

2016

Advanced Workshop on Diffusion Tensor Imaging

3-Day Workshop

From: *University Medical Center Utrecht*

2016

International Certificate of Professional Matlab Programming

170 Hours Training Course

From: *Iran Technical & Vocational Training Organization.*

2010