

Zahra Rezvani CV 2025/01

Contact Info

Zahra Rezvani

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• Accounts: Google Scholar, LinkedIn

Current Position

• Assistant Professor, Department of Computer Science, Faculty of Mathematical Sciences, Alzahra University, Tehran, Iran (Since January 2023).

• Nonresident Senior Researcher, Institute for Research in Fundamental Sciences (IPM), Tehran, Iran (Since 2023).

Research Areas

- Integration of AI, machine learning, deep learning, and reinforcement learning in cognitive modeling and bioinformatics
- Analysis of visual perception, psychophysics, and behavioral and eye-tracking data
- Medical image and signal processing, focusing on brain connectivity

Education

Year	Degree/Certificate	Institution
2021- 2023	Postdoctoral Researcher (Artificial Intelligence)	School of Computer Science, Institute for Research in Fundamental Sciences (IPM)
2018- 2019	Research Visit (Visual Perception)	Donders Center for Neuroscience, Radboud University, Nijmegen, Netherlands
2014- 2020	PhD (Cognitive Modeling)	Institute for Cognitive and brain Science (ICBS), Shahid Beheshti University (SBU)
2011- 2013	MSc (Computer Science)	Computer Science Department, Shahid Beheshti University (SBU)
2008- 2011	BSc (Computer Science)	Computer Science Department, Shahid Beheshti University(SBU)

Career Details

Year	Designation	Institution
2023 onwards	Assistant Professor	Alzahra University
2023 onwards	Nonresident senior researcher	IPM
2021-2023	Postdoctoral Researcher	IPM
2018-2019	Research Visitor	Donders Center for Neuroscience
2014-2020	PhD Candidate	Shahid Beheshti University

Honors and Awards

- IBRO School Award, 2015, 2019 and 2024.
- Defended doctoral dissertation with an excellent degree, 2019.
- Top researcher award among PhD students, Shahid Beheshti University 2018.
- Dr. Shahriari Scholarship Winner, National Elite Foundation of Iran, 2017.
- Granted PhD proposal by Iran Cognitive sciences and technology council, 2016.
- Exceptional Talent Student Title (PhD Exemption), Shahid Beheshti University, 2014.
- Exceptional Talent Student Title (MSc Exemption), Shahid Beheshti University, 2011.
- Winner of several best paper awards and travel grants.

Teaching Experience

Undergraduate Courses:

 Artificial Intelligence, Machine Learning, Image Processing, Advanced Topics, Neural Networks, Data Structures, Basic and Advanced Programming, Operating Systems, Compilers, Computer Lab (At Alzahra University; guest lecturer at Sharif University, Shahid Beheshti University, and Shafieh University)

Graduate Courses:

 Bioinformatics Basics, Machine Learning, Advanced Bioinformatics Topics, Computational Algorithms, Deep Learning for Life Sciences (At Alzahra University; guest lecturer at Shahid Beheshti University)

Membership and Professional Services

- Member, Brain and Movement Research Group, University of Tabriz (2023 Present)
- Member, IPM Artificial Intelligence Laboratory (2020 Present)
- Member, Iranian Society for Cognitive Science and Technology (ISCST) (2014 Present)
- Alumni, IBRO International School (2015)
- Executive Committee Member, Fifth and Sixth International Advanced Schools of Computing in Artificial Intelligence (ASOC 2021 and 2022)
- Scientific and Executive Committee Member, Fourth, Fifth, and Sixth National Informatics Conference (NIC 2023 2025)
- Scientific Committee Member, 13th National Conference and 3rd International Conference on Computer Vision and Image Processing (MVIP 2024)

Publications

Peer-reviewed Journal Articles

- **Rezvani, Z.,** Khosrowabadi, R., Seyedebrahimi, A., Meftahi, G. H., & Hatef, B. (2024). Stress Induction and Release: Electroencephalography Study on Brain Networks and Cortisol. Basic and Clinical Neuroscience, 15(5), 607-616.
- **Rezvani, Z.,** Jamali, N., Katanforoush, A., & Sabokrou, M. (2023). Network Analysis of Informal Social Media Conversations about Autism. Journal of Neurodevelopmental Cognition, 3(1), 16-21.
- **Rezvani, Z.,** Katanforoush, A., van Wezel, R., & Pouretemad, H. (2022). Arbitrary Eye Movement Strategies in Global-Local Processing Experiments. Journal of Neurodevelopmental Cognition, 2, 98-109.
- Sobhani, V., Rezvani, Z., Meftahi, G. H., Ghahvehchi-Hosseini, F., & Hatef, B. (2022).
 The Linear and Nonlinear Indices of Electroencephalography Change in the Stroop Color and Word Test. Journal of Modern Rehabilitation.
- Kirkels, L. A. M. H., Zhang, W., **Rezvani, Z.**, van Wezel, R. J. A., & van Wanrooij, M. M. (2021). Visual motion integration of bidirectional transparent motion in mouse optolocomotor reflexes. Scientific Reports, 11(1), 10490.
- **Rezvani, Z.,** Katanforoush, A., & Pouretemad, H. (2020). Global precedence changes by environment: A systematic review and meta-analysis on effect of perceptual field variables on global-local visual processing. Attention, Perception, & Psychophysics, 82(5), 2348-2359.
- Zhang, W., **Rezvani, Z.,** van Wezel, R. J., & Kirkels, L. A. (2020). Monocular and binocular opto-locomotor reflex biases for random dot motion in mice. Journal of vision, 20(2), 6-6.
- **Rezvani, Z.,** Khosrowabadi, R., Seyedebrahimi, A., Meftahi, G. H., & Hatef, B. (2020). Alteration of brain functional network and cortisol level during induction and release of stress: An EEG study in young male adults. Basic and Clinical Neuroscience, 0-0.
- Chehrehnegar, N., Nejati, V., Shati, M., Esmaeili, M., **Rezvani, Z.,** Haghi, M., & Foroughan, M. (2019). Behavioral and cognitive markers of mild cognitive impairment: diagnostic value of saccadic eye movements and Simon task. Aging clinical and experimental research, 31, 1591-1600.
- Zare, M., **Rezvani, Z.,** & Benasich, A. A. (2016). Automatic classification of 6-month-old infants at familial risk for language-based learning disorder using a support vector machine. Clinical Neurophysiology, 127(7), 2695-2703.
- Keshvari, F., **Rezvani, Z.,** Ghassemi, F., & Pouretemad, H. (2016). Temporal correlates of intuition and cognitive control in moral decision, making in different social contexts. European Psychiatry, 33(S1), S140-S140.

Selected Conference Papers

• Cheshmi, S. S., Mahyar, A., Soroush, A., **Rezvani, Z.,** & Farahani, B. (2023). Brain Age Estimation Using Structural MRI: A Clustered Federated Learning Approach. 2023 IEEE International Conference on Omni-layer Intelligent Systems (COINS).

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- **Rezvani, Z.,** Mousavian, S., Azimi, D., & Jabbari, P. (2023). Online AI-Based Cognitive Assessment Platform for Comprehensive Cognitive Evaluation. *12th Basic and Clinical Neuroscience Congress* 2023.
- **Rezvani, Z.,** Khanmohamadi, M., & Akhgari, A. (2023). Comprehensive Eye-Tracking Analysis of Global-Local Processing in Selective Attentional Tasks. *12th Basic and Clinical Neuroscience Congress* 2023.
- Ghader, M., Farahani, B., **Rezvani, Z.,** Shahsavari, M., & Fazlali, M. (2023). Exploiting Federated Learning for EEG-based Brain-Computer Interface System. 2023 IEEE International Conference on Omni-layer Intelligent Systems (COINS).
- **Rezvani, Z.**, Jamali, N., Pouretemad, H., Katanforoush, A., & Sabokrou, M. (2022). Informal Social Media Conversations about Autism, Network Study. *Joint Symposium of Cognitive Sciences*.
- **Rezvani, Z.,** & Katanforoush, A. (2015). Recognition of Farsi handwriting strokes using profile HMM. 2015 2nd International Conference on Pattern Recognition and Image Analysis (IPRIA).

Languages

- English (Advanced), German (Intermediate), Arabic (Intermediate), Persian (Native).
- Passionate about learning more languages!

References

- Prof Richard van Wezel, Professor in Visual Neuroscience, Donder Institute, Radboud University. Email: richard.vanwezel@donders.ru.nl
- Prof. HamidReza Pouretemad, Professor of Clinical Neuropsychology, Shahid Beheshti University. Email: h-pouretemad@sbu.ac.ir
- Dr. Ali Katanforoush, Assistant Professor of Computer Science, Shahid Beheshti University. Email: a katanforosh@sbu.ac.ir