ARSHAK REZVANI

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RESEARCH INTERESTS

- Generative AI
- Natural Language Processing
- Computer Vision
- Healthcare AI
- Brain Data Science
- Computational Neuroscience

EDUCATION

Sharif University of Technology - Tehran, Iran *September 2019 - Feburary 2024*
Bachelor of Science, ***Electrical Engineering***
Bioelectric Track, Overall GPA: **3.71/4.00**
Thesis: ***Comparison of Multi-Channel EEG Based Graph Learning Methods for Alzheimer's Disease Detection***
- Developed a novel method to construct EEG-based graphs using autoregressive models for brain connectivity analysis and disease classification.

Allameh Helli High School, Iran *September 2016 - July 2019*
Diploma in Physics and Mathematics Discipline, Overall GPA: **19.2/20.0**

PUBLICATIONS

- **Arshak Rezvani**, Nasrin Ravansalar, Mohammad Ali Akhaee, Andrew J. Greenshaw, Russell Greiner, Maryam S. Mirian, Muhammad Yousefnezhad, Martin J. McKeown, "*DiffuseGaitNet: Improving Parkinson's Disease Gait Severity Assessment with a Diffusion Model Framework*," *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, Nov. 2024. link
- **Arshak Rezvani**, Ali Akbari, Kosar Sanjar Arani, Maryam Mirian, Emad Arasteh, Martin J. McKeown, "*Interpretable EEG-to-Image Generation with Semantic Prompts*," accepted to *the Actionable Interpretability Workshop at ICML 2025*. link link

TEACHING EXPERIENCE

Deep Generative Models*	*Fall 2025*	**Deep Learning***	*Fall 2023, 2025*
Introduction to Neural Networks	*Fall 2023*	**EEG Signal Processing***	*Fall 2023*
AI & Biological Computations	*Fall 2022*	**Foundations of Programming**	*Fall 2020*
Electrical Circuits I	*Spring 2022*	**Object Oriented Programming**	*Spring 2020, 2021*
Introduction to Machine Learning	*Spring 2022*	**Electronic Circuits**	*Spring 2021*

** Graduate-level courses*

SKILLS

Programming Languages:	Python, C/C++, Java, Matlab.
Libraries & Tools:	PyTorch (+Geometric), TensorFlow (+Probability), NumPy, SciPy, Pandas, Scikit-learn, Keras, EEGLab, AFNI, Psychtoolbox.
Other Tools:	Linux, Git, Vim, Jupyter, LaTeX.

LANGUAGES

Persian: Mother tongue
English: Professional proficiency (TOEFL iBT (May 17, 2025): **108/120** (R26/L30/S27/W25))

REFERENCES

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