# AmirHossein Yavari

#### EDUCATION

University of Oklahoma Ph.D. Student in Biomedical Engineering Advisors: Dr. Farnaz Zamani Esfahlani September 2024 - Present

Sharif University of Technology Bachelor of Science in Mathematics

September 2017 - May 2023

## **Research Interest**

My research investigates how cognitive functions emerge from the dynamic configuration of large-scale brain networks. I develop and apply computational models to infer the dynamics of cognitive processes from their correlates within high-dimensional brain measurements, focusing on attention, memory and higher-order faculties such as language.

## PUBLICATIONS

1. Reproduction of "Tracking the World State with Recurrent Entity Networks." Mehrnaz Mofakhami, Amirhossein Yavari. Poster presented at EEML Summer School 2021. Best Poster Award.

#### EXPERIENCE

ShenakhtPajouh Lead Researcher Sep 2018 – Dec 2020 Deep learning researcher at ShenakhtPajouh, working on Natural Language Generation, with the goal of acquiring more explainable and interpretable models and methods.

University of Essex Scientific Collaborator We worked on a project in deep natural language processing. It is a classification problem on Potentially Idiomatic Expression (PIE).

## SKILLS

Programming and Softwares: Python, Java, PyTorch, Tensorflow, Jax, Git, R, Matlab.

# Honors

• Feb. 2025 Third place in the American Airlines Operation Research and Advanced Analytics Hackathon.

## **Relevant Coursework**

Neuroscience: Neurobiology of Disease, Neural Data Science.

Machine Learning: Machine Learning, Regression Analysis.

**Computer Science & Mathematics:** Theory of Computation, Network Optimization, Probability & Statistics, Linear Algebra, Real Analysis, Functional Analysis, Advanced Programming.