# AMIR HOSEIN ASAADI

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#### Education

#### **Shahid Rajaee Teacher Training University**

MSc in Artificial intelligence

· Supervisor: Dr. Reza Ebrahimpour

Tehran, Iran 2019 - 2022

#### Sistan and Baluchestan University

B.Sc. in Software engineering

Zahedan, Iran 2013 - 2018

#### Research Interests

 Speech and language perception

• MEG, EEG, fMRI

 Perceptual **Decision-Making** 

• Attention

 Computational Neuroscience

Neural Engineering

• Multisensory Integration

#### Publication

- Asaadi, A., Amiri, S., Bosaghzadeh, A., Ebrahimpour, R.(2024). Effects and prediction of cognitive load on encoding model of brain response to auditory and linguistic stimuli in educational multimedia. Published in scientific reports.
- Mousavi Harris, A., Asaadi, A., Payedar-Ardakani, P., Gorji-Mahlabani, Y., Ebrahimpour, R. (2023). Application of machine learning techniques to classify EEG signals in subjective pleasure ratings during varying daylight illuminance conditions within VR. Submitted to Biomedical signal processing and control.

#### **Projects**

#### How decision variables change during traning phase of RDM?

Mar 2023 - Dec 2023

- Modeling data
- · Behavioral data, Perceptual decision making, Fitting Drift Diffusion Model
- · with Dr. Reza Ebrahimpour, and Jamal Esmaily

#### Effect of Social cue in sequential decision-making

Mar 2023 - Present

- · Learning about eye data analysis
- · Psychtoolbox, Eye tracking
- with Dr. Reza Ebrahimpour, and Fatemeh Majd

## Cognitive measures while working with educational software

2022 - 2023

- EEG data collection, leading students in EEG analysis
- with Dr. Reza Ebrahimpour and Dr. Ehsan Pazouki

#### Temporal response function of Semantic dissimilarity

2022 - 2023

- Modeling data
- · Leading one master student
- with Dr. Reza Ebrahimpour, Dr. S. Hamid Amiri, and Dr. Alireza Bosaghzadeh

#### Comparing cortical brain activity from real and imaginary movements of hand Summer 2022

- Presented in neuromatch academy
- · Leading two projects on neuromatch academy
- · Miler dataset, ECOG, MNE python
- · with Dr. Vladimir Litvak, Dr. Samuel Zibman, and Mohammad Rabiei

#### Predicting activities of V4 area from natural images

Summer 2021

- · Presented in neuromatch academy
- Kay dataset, fMRI, Scikit learn
- with Dr. Ehsan Rezayat, and Raul Hernandez

#### Persian handwritten digits recognition

- · Project of Machine learning course
- Machine learning, and deep learning tools
- with Dr. Reza Ebrahimpour

#### Making educational multimedia and a handbook for python

2018

Dec 2019

- · Bachelor final project
- Making educational video, Latex
- with Dr. Reza Ebrahimpour, Dr. S. Hamid Amiri, and Dr. Alireza Bosaghzadeh

#### Online library management system

2018

- Final project of online course
- Django, python

### Work experience

- · Research assistant
  - 2022–peresent, Sharif Brain Center
- · Teaching assistant
  - Fall 2023 Advanced topics in nano, Sharif university
  - Summer 2022 Computational Neuroscience in Neuromatch Academy
  - Fall 2020 Machine learning in Shahid Rajaee Teacher Training University
  - 2015 2016 Advanced Computer Programming, Two times in University of Sistan and Baluchestan
  - 2014 2017 Computer Fundamentals and Programming, Three times in University of Sistan and Baluchestan

### Skills

**EEG:** EEGLAB, EEG data collection, Psychtoolbox

MATLAB/Python: Modeling neural data, Neural signal processing

R: Data visualization with ggplot2

ĽT<sub>E</sub>X, Git

Soft skill: Learning, and Self-discipline

Language: English - FULL professional proficiency, French - basic, Persian - Native

#### Attended Workshops

Cognition and Natural Sensory Processing Initiative (CNSP)	2021 - 2023
Symposium for Cognitive Auditory Neuroscience (SCAN)	2021
CuttingEEG	2021
EEGLAB workshop by NBML - instructor: Ali Motie Nasrabadi	2020
Cognitive Neuroscience Competition Sadra	2020
9th Iranian Brain Mapping Congress - IHBM	2020

#### Hobbies And Volunteering

- Showing sky with telescope to people
- Hiking, cycling, and traveling
- National deputy of Servas Iran