

Saba Ajami

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Female, 29



Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57197719624>

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RESEARCH INTERESTS Signal Processing, Brain-Computer Interface (BCI), Image Processing, and Biomedical Instruments

EDUCATION **University of Isfahan**

M.Sc., Biomedical Engineering, Bioelectric 2013 to 2016

- Master Thesis: **Development of a Brain-Computer Interface System based on Electroencephalography using SSVEP**
- *Overall GPA*: 17.76
- *Thesis*: 17.75

University of Yazd

B.Sc., Electrical Engineering, Telecommunications 2008 to 2012

- Bachelor Thesis: **Design and Construction of SMS Voting System**
 - *Overall GPA*: 16.26
 - *Thesis*: 19.75
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RESEARCH EXPERIENCE **Research Assistant**

Brain-Computer Interface, 2014 to present
Isfahan Neuro Technology Laboratory,
Supervisor: Amin Mahnam

Research Assistant

Electrical Stimulation of the Brain - tDCS, 2017
Isfahan Neuro Technology Laboratory,
Supervisor: Amin Mahnam

TEACHING EXPERIENCE **Teaching Assistant**

- Designed and graded assignments, **Medical Instrumentation**, Dr. Amin Mahnam 2014
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- Provided assistance to students in laboratory experiments, **Isfahan Neuro Technology Laboratory** 2015 to present
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Work
Experience

- **Medical Imaging Technology group expert**
School of Advanced Technologies in Medicine, Isfahan University of Medical Sciences
 - **International affairs expert**
School of Advanced Technologies in Medicine, Isfahan University of Medical Sciences
 - **Executive Manager of Journal of Medical Signals & Sensors**
Isfahan University of Medical Sciences
<http://www.jmssjournal.net/editorialboard.asp>
 - **Medical Image & Signal Processing (MISP) Research Center affairs expert**
Isfahan University of Medical Sciences
<https://misp.mui.ac.ir/> , <https://misp.mui.ac.ir/en>
 - **Researcher**
Medical Image & Signal Processing (MISP) Research Center, Isfahan University of Medical Sciences
 - **Senior Member**
Isfahan Neuro Technology Laboratory, University of Isfahan
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PUBLICATIONS

- [Development of a practical high frequency brain-computer interface based on steady-state visual evoked potentials using a single channel of EEG](#)
S Ajami, A Mahnam, V Abootalebi - Biocybernetics and Biomedical Engineering, 2018
 - [An Adaptive SSVEP-Based Brain-Computer Interface to Compensate Fatigue-Induced Decline of Performance in Practical Application](#)
S Ajami, A Mahnam, V Abootalebi - IEEE Transactions on Neural Systems and Rehabilitation, 2018
 - [An efficient asynchronous high-frequency steady-state visual evoked potential-based brain-computer interface speller: The problem of individual differences](#)
S Ajami, A Mahnam, S Behtaj, V Abootalebi - Journal of Medical Signals and Sensors, 2018
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SELECTED
ACADEMIC
PROJECTS

Arrhythmia ECG Noise Reduction by Ensemble Empirical Mode Decomposition Fall 2013
Course: Biomedical Signal Processing Dr Yazdchi

Removal of Ocular Artifacts in EEG—An Improved Approach Combining DWT and ANC for Portable Applications	Spring 2014
Course: Advanced Biomedical Signal Processing	Dr Yazdchi
Design and Development of ECG Amplifier	Spring 2014
Course: Biomedical Instrumentation	Dr Mahnam
A Dynamical Model for Generating Synthetic Phonocardiogram Signals	Fall 2015
Course: Biological System Identification	Dr Emadi
A Dynamical Model for Generating Synthetic Electrocardiogram Signals	Fall 2015
Course: Biological System Identification	Dr Emadi

**SPECIALIZED
SKILLS**

- EEG signal Processing (MATLAB)
 - AVR Programming (CodeVision AVR)
 - Altium Designer
 - Brain Computer Interface
 - Image Processing
 - Microsoft Office
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**LANGUAGE
SKILLS**

Persian, Native
English, Good

**STRENGTHS of
BEHAVIOR**

- Social Communication
 - Flexibility
 - Commitment and Motivation
 - Team Work
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ABOUT ME

I am working in the field of BCI systems. My research interests include EEG signal processing, Cognitive Neuroscience, Image Analysis, OCT image analysis and ERG signals.

Awards

- The Top Employee of the year 2019 at School of Advanced Technology in Medicine, Isfahan University of Medical Sciences, Isfahan, Iran
 - Cooperation in holding 1st Isfahan Biomedical Engineering Summer School held from August 17-29, 2019, in Isfahan University of Medical Sciences, Isfahan, Iran
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Certificate

- 1st Workshop on Science Meeting Reports
held on September 25, 2019, in Isfahan University of
Medical Sciences, Isfahan, Iran
 - 1st Isfahan Biomedical Engineering Summer School
held from August 17-29, 2019, in Isfahan University of
Medical Sciences, Isfahan, Iran
 - General Electric workshop on Updates in Imaging and
Diagnostic Solution
February 27-28, 2019, in Isfahan University of Medical
Sciences, Isfahan, Iran
 - Workshop on Funding Opportunities for Cooperation in
Research and Innovation between Iran and the European
Union
November 28, 2018, at the University of Isfahan, Isfahan,
Iran
 - EU-Iran Conference on Research on Migration and
Forced Displacement: Addressing Challenges,
Identifying Solutions
November 27, 2018, at the University of Isfahan, Isfahan,
Iran
 - Workshop on Adobe Audition training course
November 4, 2018, in Isfahan University of Medical
Sciences, Isfahan , Iran
 - Matlab Programming training course
August 2010, Academic Center for Education, Culture
and Research (ACECR), Isfahan , Iran
 - Negar Sanat Isatis Co. Workshop on Introduction to PLC
and Mechatronics
May 22, 2009, In Yazd
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