

CONTACT  [hasaniatefe0@gmail](mailto:hasaniatefe0@gmail.com)
 INFORMATION  GitHub
 LinkedIn
 Personal Website
 Google Scholar

London, UK

RESEARCH ☐ **Medical Imaging**
 INTEREST ☐ **Machine Learning**
☐ Deep Learning

☐ **Federated Learning**
☐ **Computer Vision**
☐ Signal Processing

EDUCATION **Shahed University**
M.Sc. in Biomedical Engineering (First Class Honours)
 • Supervised by Prof. Ali Motie NasrAbadi

Tehran, Iran
 Aug. 2017 - Sep. 2020

University of Zanjan
B.Sc. in Electrical Engineering

Zanjan, Iran
 Jan. 2013 - Aug. 2017

INTERNSHIP **BASIRA Lab, Imperial College London**
 EXPERIENCE Research Internship
 • Supervised by Prof. Islem Rekik
 • Project: Federated Multi-Task Learning on Heterogeneous Medical Images

London, United Kingdom
 Sep. 2023 – Now

Fatima Fellowship
 Research Fellow

Remote
 Apr. 2023 – Dec. 2023

• Project: Medical Image Classification using Quaternion Convolutional Neural Networks

Bio-Imaging Lab, Antwerp University
 Research Internship
 • Supervised by Prof. Mahmood Amiri

Antwerp, Belgium
 Aug. 2021 – Feb. 2023

Biological Signal Processing Lab, Shahed University
 Research Assistant

Tehran, Iran
 Aug. 2017 – Sep. 2020


Signal and Image Processing Lab, University of Zanjan
 Research Assistant

Zanjan, Iran
 Aug. 2016 – Aug. 2017

ValiAsar Hospital
 Research Internship

Zanjan, Iran
 Jan. 2016 – Sep. 2016

PUBLICATIONS **Preprints & Under Submission**

 SCHOLAR
 RESEARCHG

7. **Atefe Hassani**, Islem Rekik
 UniFed: A Universal Federation of a Mixture of Highly Heterogeneous Medical Image Classification Tasks
Machine Learning in Medical Imaging (MLMI@MICCAI), 2024
6. **Atefe Hassani**, Amin Hekmatmanesh, Ali Motie Nasrabadi
 Neuromarketing Dataset: Cognitive Movement and Decision-Making Based on Human Sexuality
Scientific Data, 2024 (*Under Submission*)
5. Soheila Rezakhani, Mahmood Amiri, **Atefe Hassani**, Vahid Sheibani, Khadijeh Esmaeilpour
 Anodal HD-tDCS on the dominant anterior temporal lobe and dorsolateral prefrontal cortex: clinical results in patients with mild cognitive impairment

Alzheimer's Research & Therapy, 2024

📄 <https://alzres.biomedcentral.com/articles/10.1186/s13195-023-01370-y>

4. **Atefe Hassani**, Amin Hekmatmanesh, Ali Motie Nasrabadi
Gender Differences in EEG Responses to Color and Black-and-White Images: Implications for NeuroMarketing Strategies
IEEE Access, 2023
📄 <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=10230236>
3. Nima Salimi-Nezhad, Stephan Missault, Anais Notario-Reinoso, **Atefe Hassani**, Mahmood Amiri, Georgios A Keliris
The impact of selective and non-selective medial septum stimulation on hippocampal neuronal oscillations: A study based on modeling and experiments
Neurobiology of disease, 2023
📄 <https://www.sciencedirect.com/science/article/pii/S0969996123000669>
2. **Atefe Hassani**, Amin Hekmatmanesh, Ali Motie Nasrabadi
Discrimination of Customers Decision-Making in a Like/Dislike Shopping Activity Based on Genders: A Neuromarketing Study
IEEE Access, 2022
📄 <https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9867935>
1. **Atefe Hassani**, Amir Hossein Foruzan
Improved PPG-based estimation of the blood pressure using latent space features
Signal, Image and Video Processing (SIVP), 2019
📄 <https://link.springer.com/article/10.1007/s11760-019-01460-1>

🏆 HONORS

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|---|------|
| Full Scholarship for Fatima Fellowship <i>Ranked amongst the top 20%</i> <i>San Francisco, California, USA</i> | 2023 |
| TWINNIBS Bootcamp Scholarship <i>Belgrade, Serbia</i> | 2023 |
| Full Scholarship for Oxford Machine Learning Summer School (MLx Health) <i>University of Oxford, UK</i> | 2023 |
| Outstanding Researcher among Master Students <i>Department of Engineering, Shahed University, Iran</i> | 2022 |
| AWS Machine Learning Foundation Scholarship <i>Udacity</i> | 2021 |
| First-rank Graduate Amongst MSc Students <i>Department of Engineering, Shahed University, Iran</i> | 2020 |

TEACHING EXPERIENCE

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|---|---------------------------------------|
| Teaching Assistant, University College London (UCL) <i>COMP0173: AI for Sustainable Development (Dr. Maria Perez Ortiz)</i> | London, United Kingdom 2023 – 2024 |
| Teaching Assistant, University College London (UCL) <i>COMP0186: Foundation of Artificial Intelligence (Dr. Sahan Bulathwela)</i> | London, United Kingdom 2023 – 2024 |

SERVICES

Program Committee and/or Reviewer

- PRIME@MICCAI 2024
- Journal of Big Data 2024

CERTIFICATES

- Machine Learning | Coursera | Stanford University
- Deep Learning Specialization | Coursera | deeplearning.ai
- fMRI Introduction | NI-edu | Amestredam

- fMRI Principle and Practice | Sharif Neuroscience Symposium
- Brain Signal Processing in Computational Neuroscience | National Brain Mapping Laboratory (NBML)
- Neuromarketing Workshop | National Brain Mapping Laboratory (NBML)

TECHNICAL SKILLS

- Programming Languages: Python, MATLAB, C
- Database Systems: SQLite, SQL Server, MongoDB
- Medical Data Analysis Tools: EEGLAB, FSL, AFNI, fMRIPrep
- Deep Learning Frameworks: Pytorch, PytorchGeometric, TensorFlow
- Tools: Scikit-Learn, NumPy, SciPy, Pandas, Matplotlib, Seaborn, Web Scraping (Beautiful Soup)
- Typesettings: Microsoft Office, LaTeX

LANGUAGE SKILLS

Persian (Native), Azerbaijani (Native), English (Professional proficiency), Turkish