

MAHBOD NOURI

ML Researcher mahbod@neuro.uni-bremen.de mahbod.me

PhD researcher in Computational Neuroscience specializing in Deep Learning, Brain-inspired AI, and TinyML. Focused on building efficient and adaptive neural architectures for edge and embedded intelligence.

EDUCATION

PhD in Computational Neuroscience

University of Bremen

MSc in Cognitive Science

University of Edinburgh

BSc in Mechanical Engineering

University of Tehran

Apr. 2023 – Present

Bremen, Germany

Sep. 2021 – Sep. 2022 Edinburgh, United Kingdom

Sep. 2016 – Sep. 2020

Tehran, Iran

SELECTED PUBLICATIONS

Interleaving cortex-analog mixing improves deep non-negative matrix factorization networks

Mahbod Nouri, David Rotermund, Alberto Garcia-Ortiz, Klaus R. Pawelzik (2025) Frontiers in Computational Neuroscience.

BioLCNet: Reward-modulated Locally Connected Spiking Neural Networks

Hafez Ghaemi*, Erfan Mirzaei*, Mahbod Nouri*, Saeed Reza Kheradpisheh (2022). Lecture Notes in Computer Science. https://doi.org/10.1007/978-3-031-25891-6_42

Toward Real-World BCI: CCSPNet, A Compact Subject-Independent Motor Imagery Framework

Mahbod Nouri*, F. Moradi*, H. Ghaemi*, A. M. Nasrabadi (*Equal Contribution)(2022). Digital Signal Processing. https://doi.org/10.1016/j.dsp.2022.103816

SELECTED CONFERENCES AND PRESENTATIONS

(Poster) Bernstein Conference in Computational Neuroscience Frankfurt am Main, Germany	Sep. 2024
Cortical Prostheses – Interdisciplinary Research towards Artificial Vision for the Blind Hanse-Wissenschaftskolleg, Delmenhorst, Germany	Sep. 2023
(Oral) 2nd Advanced Course and Symposium on Artificial Intelligence and Neuroscience Certosa di Pontignano, Castelnuovo Berardenga (Siena), Tuscany, Italy	Sep. 2022

INTERNSHIP

AI Research Intern Summer 2020 University of Tehran

Artificial Intelligence in Mechanical Engineering (AIME) Lab

- Developed a COVID-19 diagnosis model from crowd-sourced cough audio data
- Developed a real-time face mask detection system
- Image Segmentation on CT Scan COVID-19 Infection using Convolutional Neural Networks

VOLUNTEER EXPERIENCE

Second Place

since Jan. 2021 Lecturer Python Programming Lecturer at Kaaryar College, a social start-up providing programming education **Organizing Committee** Sep. 2023 Organizing the Machine Learning and its Applications summer school at the University of Bremen **SKILLS** Languages: English (C1), German (A2), Farsi/Persian (Native) Programming: Python (PyTorch, TensorFlow, Keras, Scikit-learn, Flask), Julia, C++, R Age of Empires 2: I'm really good at it. HONORS AND AWARDS 2024 LBSV Football League 3rd League Champions with the University of Bremen Team Fifth National Brain-Computer Interface (BCI) Competition June 2022 Third Rank in the National Brain-Computer Interface (BCI) Competition Focusing on Auditory Attention held by National Brain Mapping Laboratory (NBML) Oxford Hackathon Feb. 2022 Winner of the Sponsor Challenge HackTheBurgh VIII Hackathon Feb. 2022