AmirHosein Ebrahimi

Tehran, Iran

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EDUCATION

B.Sc. of Computer Engineering

2017 - 2022

Shahid Beheshti University

Tehran, Iran

- Supervisor: Dr. Dara Rahmati
- Thesis: Acceleration of biologically inspired neural network. Grade (A+)
- **GPA**: 3.04/4 (15.53/20) (Last two years of post-secondary, 65 credits): 3.63/4 (17.25/20)

RESEARCH INTERESTS

• Machine Learning, Deep Learning

Computational biology

• Bioinformatics

• Computer Vision

PUBLICATIONS

- G. Wu, A. Zaker, **A.H Ebrahimi**, S. Tripathi, A. Mer 2024 Bioinformatics Advances Text-Mining Based Feature Selection for Anticancer Drug Response Prediction Accepted
- Chapter of Book First Course In Machine Learning: Dimension Reduction & Feature Selection Chapters: 1 Elsevier, 2023 Accept in publishing process
- A.H Ebrahimi, H. Vafaei, M. Asghari, D. Rahmati 2023 Neurocomputing HA-BSN: Hardware acceleration of bio-SFA and bio-NICA, biological neural networks, on FPGA with HLS under review preprint
- S.Alipour, **A.H Ebrahimi** 2024 3rd ACM International Conference on Information and Knowledge Managemen A new approach for minimum dominating set problem submitted preprint
- A.H Ebrahimi, H. Vafaei, D. Rahmati 2022 National Informatics Conference of Iran (NIC) Estimating stochastic model's parameters using residual neural networks Accepted-p128

WORK & RESEARCH EXPERIENCE

Mer Lab | Research Assistant

2023 - present

• I contributed to groundbreaking research at Mer Lab, a leading computational biology and machine learning group affiliated with the University of Ottawa.

IPM | Research Assistant

2021 - present

• As an undergraduate, I joined this research institution willingly to expand my expertise of machine learning and deep learning. Later, I completed my internship there and remained as an AI researcher, collaborating with other AI researchers on various projects.

HUMA | Back-end developer

2023 - present

• I'm a Back-End Developer and Solution Specialist at Huma, contributing to innovative healthcare applications for remote patient monitoring, improving outcomes and accelerating research.

CMP Lab | Developer

2021 - 2023

• I worked as a programmer at CMP Lab, Shahid Beheshti University - Institute for Cognitive and Brain Sciences (ICBS), developing psychological experiments.

COURSES & CERTIFICATES

Coursera

- Structuring Machine Learning Projects
- Hyper-parameter Tuning, Regularization and Optimization
- Neural Networks and Deep Learning
- Basic Generative Adversarial Networks Build Better Generative Adversarial Networks

IPM _ CMP Lab

- Fifth IPM Advanced School on Computing and Artificial Intelligence (ASOC 2021)
- 2nd Six-day School of mathematical and computational psychology (2022)

TEACHING EXPERIENCE

Teaching Assistant - SBU

• Computer Architecture (Dr. Dara Rahmati)

Fall 2019 - 2020

• Microprocessors and Assembly (Dr. Seyed-Hosein Attarzadeh-Niaki)

Fall 2020

• Microprocessors and Assembly (Dr. Dara Rahmati)

Spring 2021

2022 - Now

Course Instructor at Onacademy

• Basic Machine Learning

• Python and R

- Advanced Machine Learning
- Data Analytics for ML
- Neural Networks
- Computer Vision

TECHNICAL SKILLS

Programming Languages

- Python: [Keras, Tensorflow, Pytorch, Scikit-learn, Scipy, PyG, FastAI]
- C/C++: [Armadillo, OpenMP]
- Java, Golang, Matlab, R

Others

• FPGA : Xilinx ZedBoard, DE0-Nano-SoC, Z-turn • Arduino

• Raspberry pi3/4

LANGUAGE

• English: Fluent (TOEFL: 102 (R=27, L=25, S=23, W=27))

REFERENCES

Dr. Arvind Mer

 Assistant Professor - Department of Biochemistry, Microbiology & Immunology Faculty of Medicine - Email: amer@uottawa.ca

Dr. Dara Rahmati

• Assistant Professor - Faculty of Computer Engineering and Science Shahid Beheshti University - Institute for Research in Fundamental Science IPM - Email: d_rahmati@sbu.ac.ir

Dr. Kamyar Givaki

• Research Associate, HPC Center, Institute for Research in Fundamental Science IPM - Email: givakik@ipm.ir