Aref Shahbakhsh

Master of Computer System Architecture, AI Research Assistant

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Research Interests

- Theory of Machine Learning
- Computer Vision
- Computational Biology
- Natural Language Processing

Education

Sharif University of Technology 2021 - 2024
Master of Computer System Architecture Cumulative GPA: 3.6 /4
Thesis: "Prediction of mRNA Subcellular Localization using Deep Learning and Investigating Optical Implementation Feasibility."
Advisor: Dr. S. Koohi

University of Sistan and Baluchestan 2016 - 2021
Bachelor of Computer Science, Ranked 1st
Thesis: "Run Machine Learning Algorithms on News Website." Thesis Grade: 20 /20
Advisor: Dr. M.M Keikha

Publications

[1] LGLoc: a naïve Bayse classifier for the prediction of mRNA subcellular localization based on Bidirectional Encoder Representations from Transformers and Graph Neural Network Encoder (Writing in Progress, **First Author**)

[2] DDRCNN-CR: Utilizing Deep Residual Convolutional Neural Networks to Forecast Colorectal Cancer through cfDNA Methylation Patterns (**Submitted on BMC Bioinformatics**, Second Author)

Work Experiences

Software Engineer May 2019 - Sep 2021
Taftan Intelligent Programmers company
Developing Android Applications.
Supervisor: Dr. Y.K. Tamandani

Frontend Developer Jul 2018 - Aug 2018
University of Sistan and Baluchestan
Developing part of the University of Sistan and Baluchestan website.
Supervisor: Dr. M.M. Keikha

Android Developer Jun 2019
Bazaar, the Largest Persian App Store
Developing Photo Hider Plus Application.

Academic Experience

Teacher Assistant
- Introduction to Bioinformatics Spring 2023 Instructor: Dr. S. Akbari
- Theory of formal languages and Automata Fall 2023 Instructor: Dr. M. Dolati
- Computer Networks Fall 2023 Instructor: Dr. L. Arshadi
- Data Structures Fall 2020 Instructor: Dr. M.M. Keikha
- Data Bases Spring 2020 Instructor: Dr. B. Lakzaei
- Fundamentals of Programming Fall 2018 Instructor: Dr. E. Shamsi

Scientific Staff
- Artificial Intelligence Staff (Head Staff)
  The hardwar-event-Sharif University of Technology Fall 2024

Workshops
- Hugging Face: A Platform to Democratize Open-Source AI Spring 2023
- Winter Seminar Series (Advanced Topics in Computer Science) Spring 2024

NOTABLE COURSES

Bachelor

Data Mining	19.5/20	Advanced Programming	18.5/20
General Mathematics 2	19.9/20	Mobile device programming	19/20
Computational theory	19/20	Design of Algorithms	17/20
Data Bases	20/20	Design of Fundamentals of Information	19/20
Topics in Computer Science	19/20	Design of Mathematical Software	17/20

Master

Structural bioinformatics	17/20

SKILLS

- **Programming Languages:** C++, Verilog, C#, Python, Java, Javascript, SQL, Tcl
- **Framework and Tools:** Pytorch, Tensorflow, Pytorch Geomtric, Scikit- learn, Django, React.js
- **Software:** MATLAB, Modelsim, VMD, Unity, Android Studio, Unreal Engine, Booksim, Kali Linux

HONORS AND AWARDS

Fellowship from Sharif University of Technology
As an Exceptionally Talented student, for Master of Computer System Architecture — 2021 - 2024
Fellowship from University of Sistan and Baluchestan
As an Exceptionally Talented student, for Bachelor of Computer Science — 2016 - 2021
Ranked 152 (among over 12,000 participants) in Iran's national graduate entrance exam in Computer Engineering — 2021

LANGUAGES

English Toefl Score (Reading:20, Listning:20, Speaking:18, Writing:20)
Persian Native

REFERENCES

Somayyeh Koohi, PhD.
- Associate Professor, Department of Computer Science and Engineering
- Sharif University of Technology
- Visiting Scholar: University of California
- Email: koohi@sharif.edu

Saeedeh Akbari, PhD.
- Postdoctoral Researcher
- KTH Royal Institute of Technology
- Alma Mater: Sharif University of Technology
- Email: akbaris@kth.se

Yahya Kord, PhD.
- Assistant Professor, Department of Computer Science
- University of Sistan and Baluchistan
- Alma Mater: Chandigarh University
- Email: yahya.kord@cs.usb.ac.ir