Ehsan Kiakojouri

Curriculum Vitae

Department of Computer Engineering and Information Technology Shiraz University of Technology Modarres Blvd., Shiraz, Iran

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RESEARCH INTERESTS

- Deep Learning
- Computer Vision
- Reinforcement Learning
- Computational Intelligence
- Optimization

EDUCATION

Shiraz University of Technology, Shiraz, IRAN. September 2018 - June 2022
 B.S. in Computer Engineering, GPA: 17.63/20 (last year: 19.35/20), (University and Department Average GPA are 15.24 and 15.46 Respectively)

Relevant and Mentionable Coursework (GPA: 18.54/20):

Principles of Computational Intelligence (20/20), Principles of Database Design (19.14/20), Design of Algorithms (17/20), Pattern Recognition (18.1/20), Signals and Systems (18/20), Artificial Intelligence and Expert Systems (19/20).

Kherad Public Exemplary High School, Qeshm, IRAN. Sep 2014 - June 2018
 Diploma in Physics and Mathematics Discipline, GPA: 18.75/20

HONORS AND AWARDS

- Ranked top **9**% among more than 140,000 participants in National University Entrance Exam, Admitted to Shiraz University of Technology. (Best Engineering University in South of Iran), Summer 2018.
- Ranked 5^{th} among computer engineering students, Shiraz University of Technology.

PUBLICATIONS

Automated Deep CNN Design using Modified Bat Algorithm for Vehicle Classification; Kiakojouri, E.*,
Dolatpour Fathkouhi*, A., Kavousi-Fard, A., and Karimi, M., Submitted to IEEE Transactions on Pattern
Analysis and Machine Intelligence (T-PAMI), under review.

TEACHING AND WORK EXPERIENCE

- Teaching Assistant of **Fundamentals of Computer Programming** course in Shiraz University of Technology; Fall 2019; (Prof. Pirooz Shamsinejad).
- Teaching Assistant of **Advanced Programming** course in Shiraz University of Technology; Fall 2019; (Prof. Pirooz Shamsinejad).
- Teaching Assistant of **Artificial Intelligence & Expert Systems** course in Shiraz University of Technology; Fall 2021; (Ali Sadeghi).
- Teaching Assistant of Design of Algorithms course in Shiraz University of Technology; Spring 2020; (Prof. Omid Bushehrian).
- Teaching Assistant of **Computational Intelligence** course in Shiraz University of Technology; Spring 2020; (Ali Sadeghi).
- Teaching Assistant of **Signals and Systems** course in Shiraz University of Technology; Spring 2022; (Prof. Kamran Kazemi).

Responsibilities included: problem solving sessions; designing and grading problems for quizzes, exams and programming projects.

RESEARCH EXPERIENCE

- Development of several explainable artificial intelligence algorithms along with literature review, Apr 2022; a joint work with A. Dolatpour Fathkouhi, R. Akbari, R. Razavi-Far, and J. Zarei; work in progress. We are reviewing the literature on sample neighborhood problems in XAI algorithms as well as designing and implementing two LIME-inspired XAI algorithms using swarm optimization and Siamese neural network.
- Examining the role of smoking in covid-19 patients, Feb. 2022 Mar. 2022; a joint work with A. Dolatpour Fathkouhi, R. Akbari and S.M.J. Mortazavi.

 We Investigated the role smoking in covid-19 patients in the city of Shiraz.
- Design and Implementation of a swarm optimization algorithm for designing architecture of deep learning models for classifying vehicle types using audio signals, Jan. 2021 Mar. 2022; a joint work with A. Dolatpour Fathkoohi, A. Kavousi-Fard and M. Karimi at Shiraz University of Technology, Shiraz, Iran We developed a novel swarm optimization algorithm and designed blocks of neural networks to fit the evolutionary optimization and ease the process of architecture design and optimization and applied the solution on a real-world problem.

ACTIVITIES

• Executive Member at CE & IT Scientific Association at Shiraz University of Technology, Shiraz, Sep 2020 – Mar 2021 (holding webinars for the professional education of students).

SKILLS

- Human Languages: Persian (Native) and English (Reading, Writing, Listening, Speaking)
- **Programming Languages**: C++, Java, Python
- Programming Tools: Tensorflow, Numpy, Pandas, MATLAB, Weka, CodeVision AVR, Proteus

CERTIFICATES

- Deep learning & Neural Network Workshop, Loop Academy, Tehran, Iran, Apr 2020
- Brain Stimulation & Brain Signals, National Brain Mapping Laboratory (NBML), Tehran, Iran, November 2021

HOBBIES

- Art, Painting (Ranked 2nd in Art Contest amongst students of all schools in all educational levels in province in Hormozgan, Iran, 2014.)
- Sports, Ping Pong, Karate(Kyokushin), Swimming, Cycling.
- Study and Reading, in search of wisdom.

REFERENCES

• **Dr. Abdollah Kavousi-Fard**, Associate Professor, Department of Electrical and Electronics Engineering, Shiraz University of Technology
Phone: +98-713 727 9189, Email: *kavousi@sutech.ac.ir*

 Dr. Reza Akbari, Associate Professor, Department of Computer Engineering and Information Technology, Shiraz University of Technology

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