

# Ehsan Kiakojouri

## Curriculum Vitae

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

Cell Phone: +98 938 867 3782  
[e.kiakojouri@sutech.ac.ir](mailto:e.kiakojouri@sutech.ac.ir)  
<https://ehsankiakojouri.github.io/CV>

- 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<sup>th</sup>** 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	<ul style="list-style-type: none"> <li>• <b>Development of several explainable artificial intelligence algorithms along with literature review</b>, 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.</li> <li>• <b>Examining the role of smoking in covid-19 patients</b>, Feb. 2022 – Mar. 2022; a joint work with A. Dolatpour, R. Akbari and S.M.J. Mortazavi. We Investigated the role smoking in covid-19 patients in the city of Shiraz.</li> <li>• <b>Design and Implementation of a swarm optimization algorithm for designing architecture of deep learning models for classifying vehicle types using audio signals</b>, Jan. 2021 – Mar. 2022; a joint work with A. Dolatpour fathkoochi, 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.</li> </ul>
ACTIVITIES	<ul style="list-style-type: none"> <li>• <b>Executive Member</b> at CE &amp; IT Scientific Association at Shiraz University of Technology, Shiraz, Sep 2020 – Mar 2021 (<i>holding webinars for the professional education of students</i>).</li> </ul>
SKILLS	<ul style="list-style-type: none"> <li>• <b>Human Languages:</b> Persian (Native) and English (Reading, Writing, Listening, Speaking)</li> <li>• <b>Programming Languages:</b> C++, Java, python</li> <li>• <b>Programming Tools:</b> Tensorflow, Numpy, Pandas, Matlab, Weka, CodeVision AVR, Proteus</li> </ul>
CERTIFICATES	<ul style="list-style-type: none"> <li>• <b>Deep learning &amp; Neural Network Workshop</b>, Loop Academy, Tehran, Iran, Apr 2020</li> <li>• <b>Brain Stimulation &amp; Brain Signals</b>, National Brain Mapping Laboratory (NBML), Tehran, Iran, November 2021</li> </ul>
HOBBIES	<ul style="list-style-type: none"> <li>• <b>Art</b>, Painting (Ranked 2st in Art Contest amongst students of all schools in all educational levels in province in Hormozgan, Iran, 2014.)</li> <li>• <b>Sports</b>, Ping Pong, Karate(Kyokushin), Swimming, Cycling.</li> <li>• <b>Study and Reading</b>, Search for wisdom.</li> </ul>
REFERENCES	<ul style="list-style-type: none"> <li>• <b>Dr. Abdollah Kavousi-Fard</b>, Associate Professor, Department of Electrical and Electronics Engineering, Shiraz University of Technology Phone: +98-713 727 9189, Email: <a href="mailto:kavousi@sutech.ac.ir">kavousi@sutech.ac.ir</a></li> <li>• <b>Dr. Reza Akbari</b>, Associate Professor, Department of Computer Engineering and Information Technology, Shiraz University of Technology Phone: +98-713 726 1391, Email: <a href="mailto:akbari@sutech.ac.ir">akbari@sutech.ac.ir</a></li> </ul>