Objectives and Major Interests

I have a Master's degree in **Artificial Intelligence** from Shiraz University, Shiraz, Iran and also an **Information Technology** Undergraduate degree from Shiraz University of Technology, Shiraz, Iran. My research interests are as follow:

- Art and Craft Design through AI (Language Theory, Physical Simulation, Machine Learning)
- Deep Learning (CNNs, LSTMs, Graph Neural Networks)
- Generative Modelling (GANs, Transformers)
- Reinforcement Learning (Q-learning, Actor-critic)

EDUCATION

2016–2019 **Master's Student**, in Artificial Intelligence, Shiraz University , Shiraz, IRAN GPA: 17.29/20.0 (3.86/4.00)(1.10 in German Grading System)

Statistical Pattern Recognition***, Optimization Algorithms, Machine Learning***, Advanced Engineering Mathematics***, Digital Image Processing***, Bioinformatics and Computational Biology, Fuzzy Systems and Propositions***.

(***: earned one of the first three grades in the course.)

2012–2016 **Undergraduate Student**, in Information Technology Engineering, Shiraz University of Technology, Shiraz, IRAN

GPA: 17.63/20.0

Theory of Languages and Automata*, Design of Algorithms*, Operations Research, Computer Networks I*, Computer Networks II*, Discrete Mathematics*, Distributed Software*, Artificial Intelligence, Computer Graphics, Advanced Programming*, Introduction to Computer Programming*, Information Technology Engineering, Software Engineering II*, Mathematics II*, Mathematics II*.

(*: earned the highest grade in the course.)

2008–2012 **High School Diploma**, *Mathematics and Physics Discipline*, Eghbal Trade High School, Shiraz, IRAN

Total GPA 18.20/20.0

ACADEMIC HONORS AND AWARDS

- Won travel grant by GraDAna Erasmus+ Project and attended Big Data Winter School at Bonn University, in 2018.
- Accepted in the M.Sc. program without university entrance exam, as an exceptional student in the fields of Artificial Intelligence as well as Information Technology at Shiraz University, and Software Engineering and Computer Networks at Shiraz University of Technology.
- Awarded by University Chair as **exceptional talent student** in 2015.
- Ranked **2nd** amongst University Students of Class 2012, Shiraz University of Technology based on the overall GPA.
- Validated for the second round of Iranian National Mathematics Olympiad. 2010.
- Validated for the second round of Khwarizmi International Award(KIA). 2009.

THESIS AND RESEARCH EXPERIENCE

- 2013–2016 Relevant to the Undergraduate Thesis: Machine Learning Techniques and Algorithms using Big Data, under supervision of Dr. Reza Akbari.
- 2015–2016 **Research**: Designing a new optimization algorithm called Dog Search Algorithm (DSA) for solving numerical optimization problems, under supervision of Dr. Reza Akbari.
- 2016–2018 Relevant to Masters Thesis A Large-Margin Approach for Prototype Weighting in Nearest Neighbor Classifier, under supervision of Dr. K. Ziarati and Dr. M. Taheri (Excellent Score).

PUBLICATIONS

- 2022 Yalda Shankar, Sukrit Shashi Shankar, Caritistic: Drawing Face Caricatures like a Human Artist, ACM Transactions on Graphics (WORKING PAPER)
- 2022 Yalda Shankar, Sukrit Shashi Shankar, MinArt: Generating Minimalistic Line Art from 2D photos, ACM Transactions on Graphics (WORKING PAPER)
- 2022 Yalda Shankar, Sukrit Shashi Shankar, GaSP: Garment Stitching Patterns from Multi-view Images, ACM Transactions on Graphics (WORKING PAPER)

Computer & Software Skills

Python (Pytorch, Keras, Tensorflow), MATLAB, R, Java, Affinity Designer, Procreate, Adobe Illustrator, Adobe Premiere Pro, Clo3D

WORK EXPERIENCE

- Fall 2015 Teaching Assistant of **Software Engineering I** (Dr. O. Booshehrian), Shiraz University of Technology, Shiraz, Iran.(bachelor course)
- Fall 2015 Teaching Assistant of **Operating Systems** (Dr. R. Akbari), Shiraz University of Technology, Shiraz, Iran.(bachelor course)
- Fall 2015 Teaching Assistant of **Engineering Economics** (Dr. J. Eghtesadifar), Shiraz University of Technology, Shiraz, Iran.(bachelor course)
- Fall 2017 Teaching Assistant of **Statistical pattern recognition** (Dr. Z. Azimifar), Shiraz University, Shiraz, Iran.(master course)
- Fall 2017 Teaching Assistant of **Advanced Engineering Mathematics** (Dr. M. Taheri), Shiraz University, Shiraz, Iran.(master course)
- Winter 2018 Machine Learning Programmer, Teyhoo Rayane company, Fars Science and Technology Park, Shiraz, Iran.

SEMINARS AND PRESENTATIONS

- Alliance Academy Education and Training hereby certifies that I has successfully completed education and training in Efficiency in **Industry** Training Course, Spring **2013**.
- Lecture on Music and Mathematics an overview of relations between music and mathematics. I studied group theoretic aspects of musical structures and the use of fractals in musical algorithms. Shiraz University of Technology, Summer 2013.
- Lecture on Social Networks: Properties and Structure in Mathematics and Interdisciplinary Science workshop, an overview of related mathematical research ideas in Graph Theory and Optimization, Mathematics Department, Shiraz University, Fall 2014.
- Workshop on Automated Composition of Big Data services by Shiraz University of Technology, Shiraz University, Fall 2014.
- Lecture on **Applications of Computational Geometry in Computer Graphics** by Dr. E. Damiani and Dr. S. M. Astaneh, Shiraz University of Technology, Fall **2017**.
- Workshop on Automated Composition of Big Data services by Shiraz University, Fall 2017.
- Workshop on Polymerase chain reaction (PCR) by Genetic group of Shiraz University of Medical Sciences, Fall 2017.
- Winter School on **Data Analytics** for IT Enterprises in **Bonn university** funded by Erasmus+, Winter **2018**.

LANGUAGE SKILLS

[Persian , Native] [English , Advanced] [German , Elementary] [Hindi , Elementary]

Extracurricular Activities

Music, Painting, Hiking, Cycling, Cooking, Reading, Interior Decoration, Fashion Designing