SEYED ARSHAN DALILI

arshandalili@gmail.com +98-912-070-9646
arshandalili.github.io Sharif University of Technology, Tehran, Iran

Education

- **Bachelor in Computer Engineering** Sep. 2019 - Present
  Sharif University of Technology *Tehran, Iran*
- **Diploma of Mathematics** Sep. 2016 - Jun. 2019
  Shahid Beheshti School, National Organization for Development of Exceptional Talents (NODET) *Sari, Iran*

Publications

- *Journal Paper:* **Early Fake News Detection Using Deep Reinforcement Learning**
  *(Will be submitted to **Neurocomputing Journal** in weeks)*
- *Workshop Paper:* **Visual Word Sense Disambiguation** (B.Sc. Project)
  (Forthcoming – SemEval 2023 Challenge)

Honors and Awards

- Outstanding GPA among Computer Engineering Students at Sharif University of Technology, 2022.
- Ranked **6th nationwide** among **150,000** participant in Iran National University Entrance Exam (Konkour) in Mathematics Branch, 2019.
- Received full scholarship (tuition waiver) from Sharif University of Technology for Bachelor's degree, 2019.
- Participated at Computer National Olympiad, 2018.

Research Interests

- Natural Language Processing
- Information Retrieval
- Social Networks
- Artificial Intelligence and Machine Learning

Research Experience

- **Visual Word Sense Disambiguation (B.Sc. Project, Ongoing)**:
  Supervisor: Prof. Asgari
  Working on a model to select the corresponding image of ambiguous words in a specific context.
- **Early News Classification**:
  Supervisor: Dr. Ramezani
  A novel early news classification model that uses reinforcement learning to label sequences of news and outperforms SOTA models.
- **Implemented Credible Early Detection Point model in Pytorch**:
  Implemented and published the CED model in Pytorch in order to make it easier to use compared to paper's original old version of Tensorflow.

Teaching Experience

- **Artificial Intelligence** Sep. 2022 - Present
  Instructor: Prof. Rohban *Sharif University of Technology*
  Designing practical assignments about local search and grading assignments.
- **Modern Information Retrieval** Sep. 2022 - Present
  Instructor: Prof. Beigy *Sharif University of Technology*
  Designing practical assignments, supervising assignments, and grading assignments.

- **Computer Architecture** Feb. 2022 - Sep. 2022
  Instructor: Prof. Sarbazi-Azad *Sharif University of Technology*
  Grading assignments, mid-term, and final and writing solutions for mid-term and final.
- **Computer Structure and Language** Sep. 2021 - Feb. 2022
  Instructor: Prof. Sarbazi-Azad *Sharif University of Technology*
  Designing projects and grading projects.
- **Fundamentals of Electrical and Electronic Circuits** Sep. 2021 - Feb. 2022
  Instructor: Prof. Hemmatyar *Sharif University of Technology*
  Designing theoretical assignments and grading assignments.
- **Advanced Programming** Sep. 2020 - Feb. 2021
  Instructor: Dr. Salmani *Sharif University of Technology*
  Designing practical assignments and projects.

Work Experience

- **Advisor, National University Entrance Exam (Konkour)** Jun. 2020 - Feb. 2021
  Various Institutions and Private *Sari, Iran*
- **Tutoring, High School Mathematics** Jun. 2020 - Feb. 2021
  Various Institutions and Private *Sari, Iran*
- **Tutoring, High School Physics** Jun. 2020 - Feb. 2021
  Various Institutions and Private *Sari, Iran*

Selected Course Projects

- **Search engine for crawled news using Boolean, TF-IDF, FastText, Transformers, and Elasticsearch models and classification, clustering, and link analysis for crawled news**:
  Modern Information Retrieval - Supervisor: Prof. Asgari - Spring 2022
- **Create a model to detect numerical values and physical quantities in Persian texts with the ability to convert physical quantities**:
  Modern Information Retrieval- Supervisor: Prof. Asgari - Spring 2022
- **Training an agent to play Atari using Reinforcement Learning**:
  Artificial Intelligence - Supervisor: Prof. Rohban - Fall 2021
- **Autoencoder for generating next handwritten digit and MNIST classifier**:
  Artificial Intelligence - Supervisor: Prof. Rohban - Fall 2021
- **Simulation of a model that represents a discrete-event system and its queue status**:
  Computer Simulation - Supervisor: Prof. Safaei - Fall 2021
- **Use Principal Component Analysis (PCA) to keep important information of images**:
  Linear Algebra - Supervisor: Dr. Hossein Ghorban - Spring 2021
- **Introduction to Stanza model and reviewing its structure**:
  Numerical Computations - Supervisor: Dr. Baharifard - Spring 2021

Relevant Courses

Artificial Intelligence	**20.0/20.0**
Modern Information Retrieval	**20.0/20.0**
Linear Algebra	**19.6/20.0**
Data Structures and Algorithms	**20.0/20.0**
Design Algorithms	**19.8/20.0**
Scientific and Technical Presentation	**19.4/20.0**
Numerical Computations	**20.0/20.0**
Computer Simulation	**20.0/20.0**
System Analysis and Design	**19.0/20.0**
Game Theory	**20.0/20.0**

Skills Summary

- **Languages**: Python, C, C++, Java, SQL, Verilog, Assembly
- **Packages and Applications**: Pytorch, Tensorflow, Sklearn, NLTK, Scipy, Numpy, Pandas, Django, Modelsim, Proteus Design Suite
- **Tools**: Git, Docker, Jira, Postgres, LaTeX

Language Proficiency

- **Farsi**: Native
- **English**: Fluent

Extracurricular Activities

- Loves running / Playing video games / Astronomy (Former member of Sari Astronomy Group) / Movie buff / Photography / Exploring new places (Climbing,$\cdots$)