

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*

UNDER-PREPARATION PUBLICATIONS

- Multimodal Sense Using WordNet and Diffusion Dataset - *Forthcoming - ACL 2023*
- Visual Word Sense Disambiguation (B.Sc. Project) - *Forthcoming - SemEval 2023*

HONORS AND AWARDS

- Outstanding GPA among Computer Engineering Students at Sharif University of Technology, 2022.
- Ranked **6th nationwide** among more than **164,000** 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 and Extraction
- Knowledge Acquisition
- 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.
- **Computational Semantics:**
Supervisor: Prof. Asgari
Working on different approaches for understanding the meaning of Natural Language and analyzing approaches to make multimodal models able to understand the Natural Language.
- **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, reviewing, 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

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|---------------------------------------|-----------|
| 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

- **Programming 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, L^AT_EX

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,...)