Mohammadreza Shakouri

Google Scholar · mohammadrezashakouri · mohammadrezashakouri@eng.uk.ac.ir · Github

Summary

Computer Engineering graduate and AI/ML researcher specializing in vision-language models and medical image analysis, with first-author publication experience at an international venue (Springer/ISVC). Seeking research-focused graduate studies in Artificial Intelligence.

Research Interests: Vision-Language Models · Deep Learning · Medical Image Analysis · Computer Vision

Education

Shahid Bahonar University of Kerman 2018 – 2023
Bachelor of Science in Computer Engineering | *GPA: **3.23/4 (Last 2 years: 16.58/20.0)***

Experience

Researcher, Shahid Bahonar University of Kerman, Iran Jan 2025 – Present
Supervised by Prof. Mahdi Eftekhari
Project: Vision-Language Models for Treatment Planning in Restorative Dentistry

- Evaluating VLM pipelines for restorative dental treatment planning from intraoral photographs.
- Investigating a clinical reasoning pipeline that extracts structured clinical findings from images and uses an LLM for treatment planning.

Research Assistant, Shahid Bahonar University of Kerman, Iran Sep 2022 – Aug 2023
Supervised by Prof. Mahdi Eftekhari
Project: Self-supervised learning for chest X-ray classification

- Compared self-supervised methods with different networks and frameworks for chest X-ray classification.
- Designed and implemented a self-supervised method based on a vision transformer for chest X-ray classification.

Teaching Assistant, Shahid Bahonar University of Kerman, Iran 2021 – 2022

- **Advanced Programming** | Fall 2021, Spring 2022
- **Artificial Intelligence and Expert Systems** | Fall 2022

Publications

DINO-CXR: A Self Supervised Method Based on Vision Transformer for Chest X-Ray Classification. **Mohammadreza Shakouri**, Fatemeh Iranmanesh, Mahdi Eftekhari. *18th International Symposium on Visual Computing (ISVC'23), Lake Tahoe, Nevada, US, October 2023. Springer.* *Springer Link*

SELECTED COURSEWORK

Machine Learning: 17.5/20
Basics of Speech and Language Processing: 17.73/20
Fundamentals of Computational Intelligence: 18.75/20
Advanced Programming: 19.75/20
Engineering Mathematics: 19.25/20
Engineering Statistics: 17/20

Technical Skills

Programming Languages	Python, C#, C/C++, JavaScript
Machine/Deep Learning	Pytorch, NumPy, Pandas, Scikit-Learn, Seaborn, Matplotlib, Scipy, NLTK, OpenCV
Software & Tools	Jupyter Notebook, Google Colab, Git, SQL, LaTeX, Jira, React, ASP.NET

Languages

Persian: Native **English:** Professional working proficiency

References

Prof. Mahdi Eftekhari
Professor, Computer Engineering,
Shahid Bahonar University of Kerman
Google Scholar · Email

Prof. Masoud Saeed
Professor, Computer Engineering,
Shahid Bahonar University of Kerman
Google Scholar · Email