# Seyedeh Masoumeh Taheri



### EDUCATION

## B.Sc. in Computer Software Engineering

Noshirvani University of Technology, Babol, Iran

2018 - 2022

- Final Project: ESVR-NET: Ensemble Support Vector Regression Meta-feature Space Generator based on Transferred Deep Learning of Medical Images
- Supervisor: Dr. Hesam Omranpour
- **GPA:** 15.82/20

#### Diplomas in Mathematics and Physics

National Organization for Development of Exceptional Talents, Babol, Iran

2014 - 2018

2023

2022

• **GPA:** 19.87/20

## Research Interests

• Machine learning

• Medical image analysis

• Deep learning

• Computer vision

#### **PUBLICATIONS**

• Omranpour, H., Mohammadi Ledari, Z. & Taheri, M. Presentation of encryption method for RGB images based on an evolutionary algorithm using chaos functions and hash tables. Multimed Tools Appl 82, 9343–9360 (2023).

https://doi.org/10.1007/s11042-022-13734-x

• Omranpour, H., Mohammadi Ledari, Z. & Taheri, M. Presentation of encryption method for RGB images based on an evolutionary algorithm using chaos functions and hash tables. Multimed Tools Appl 82, 9343–9360 (2023).

https://doi.org/10.1007/s11042-022-13734-x

## ACADEMIC EXPERIENCE

Teaching Assistant, Noshirvani University of Technology, Babol, Iran

Feb'20 - Jun'20

2021 - present

- Course: Data Structures
- Supervisor: Dr. Hesam Omranpour

#### Research Assistant, Computational Intelligence Laboratory

- Devised an innovative algorithm for the classification of Covid-19 through Xray images and breast cancer via ultrasound scans, resulting in accuracy enhancements of 3.6% and 4.8% respectively, in comparison to existing method-
- Mentored junior researchers, providing guidance on deep learning methodologies, and Python programming
- Translated technical research paper on image encryption from Persian to English, maintaining content integrity and ensuring precise representation of intricate cryptographic concepts, published in Multimedia Tools and Applications Journal

## Work Experience

#### Python Developer, Roshan (AI Company), Tehran, Iran

2022 - present

- $\bullet$  Created and executed a text preprocessing algorithm, boosting AI text classification model performance by 20%
- Designed and implemented RESTful APIs to facilitate seamless communication between frontend interfaces and AI models, enhancing user experience.
- Optimized database queries and schema designs to enhance data retrieval speeds, resulting in a 40% decrease in API response times
- Implemented continuous integration and continuous deployment (CI/CD) pipelines, automating testing, building, and deployment of AI backend services
- Implemented authentication and authorization mechanisms using technologies like JWT tokens and Djoser library to maintain secure user access to AI applications
- Collaborated in a cross-functional team to architect and develop backend solutions for AI-powered products, ensuring scalability and efficient data processing

## PROJECTS

- $\bullet$  Created and executed a text preprocessing algorithm, boosting AI text classification model performance by 20%
- Designed and implemented RESTful APIs to facilitate seamless communication between frontend interfaces and AI models, enhancing user experience.
- Optimized database queries and schema designs to enhance data retrieval speeds, resulting in a 40% decrease in API response times

#### SKILLS

**Programming** Python, MATLAB, C++, Java

Tools Tensorflow, Scikit-learn, keras, OpenCV, Pandas, PostgreSQL, Git, Django, Docker,

Celery, REST APIs

**Languages** Also some more of this, Some more that, And some of this and that etc.

#### Related Courses

Courses	Scores (out of 100)
Data Mining	91.5
Advanced Algorithms	88
Artificial Intelligence and Expert Systems	88
Design of Algorithms	83
Data Structures	80.5
Python	100
Deep learning	96

# Honors and Awards

- ranked 1st among all bachelor projects
- Research grant (No P/M/1110)
- Ranked within the top 1% among more than 140,000 participants in the Iranian university entrance exam for the bachelor's degree
- Ranked within the top 10% among more than 10,000 participants in the Iranian Computer Olympiad
- Ranked within the top 10% among more than 10,000 participants in the Iranian Physics Olympiad

## REFERENCES

- Dr. Hesam Omranpour, Assistant Professor at Babol Noshirvani University of Technology, Email: h.omranpour@nit.ac.ir
- Dr. Mehdi Emadi, Assistant Professor at Babol Noshirvani University of Technology, Email: m.emadi@nit.ac.ir
- Dr. Mehdi Emadi, Assistant Professor at Babol Noshirvani University of Technology, Email: m.emadi@nit.ac.ir

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