

## SUMMARY:

- I am a highly motivated student with a research background in **deep learning** and **medical images**. I have teaching experience, worked in research groups and improved **natural language processing for chatbots**, and worked with computer vision models.
- I am an experienced programmer and Python developer, with 5 years of experience in academic and industrial projects. Including artificial intelligence, web application, and algorithm design. I also worked on full **research projects for development** including a **virtual fitting room (computer vision - [magifits.com](http://magifits.com))** and recommender system.

## EDUCATION:

- Bachelor's degree in computer software engineering
  - Shahrekord University 2017-2021
  - Final project: Medical Image classification. | 20 out of 20
- Relevant Projects:
  - TF-IDF for text feature extraction
  - Text classification for sentiment analysis
  - Comparing Multiple machine learning methods, including:
    - neural networks, decision tree, ...
  - Implanted an expert system for medical questioning
  - Implanted multiple search algorithms for a game agent in a grid

## RESEARCH EXPERIENCE:

- Worked on a paper for Detecting cancer cells using **Ensemble** deep learning methods including Densenet, Condesnet, and VGG using **probability distribution** and **proper scoring rules**.
  - final stages (writing the paper)
- Worked on a paper based on Information Fusion for the **probability density function** using **supra-Bayesian fusion**.
- Worked with Signal processing projects including
  - Worked on **WESAD dataset** to detect human physiological and motion data as part of a side project.
  - Worked with tacotron 2 project to detect and modify audio as part of a side project.

## RESEARCH INTERESTS :

- Deep learning
- Medical image processing
- Natural language processing
- Multi-modal networks
- Reinforcement learning

## REFERENCES:

- **Dr. Mohammad Ehsan Basiri** ..... [basiri@sku.ac.ir](mailto:basiri@sku.ac.ir)
  - Associate Professor of Artificial Intelligence, Shahrekord University  
<https://scholar.google.com/citations?user=D77lvVUAAAAJ> h-index= **23**
- **Moloud Abdar** ..... [m.abdar@deakin.edu.au](mailto:m.abdar@deakin.edu.au)
  - Ph.D. student, Deakin University, Australia  
<https://scholar.google.com/citations?user=PwgggdIAAAAJ> h-index= **31**

## WORK EXPERIENCE:

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### NAFUN International (Nafun tech)

AI programmer and designer | since 2021

- Worked on a **virtual fitting room** using multiple types of **image segmentation** under the supervision of **Dr. Fariba Shaker** ( [magifits.com](http://magifits.com) )
- Worked on **Bert-based Chatbot** and Implanted it's backend.

### Freelancer

Python developer | since 2017

[github: github.com/FarbodFarhangfar](https://github.com/FarbodFarhangfar)

- Optimized RSA encryption (Python)
- Cooking recipe website (Django REST framework)
- Captcha solver (Keras)
- Spline-Visualizing-Service: display spline lines on an image (OpenCV, Matplotlib)

## TEACHING EXPERIENCE:

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- Organized and taught multiple **"Python programming language" classes** for university students at Shahrekord University, 2019
- Helped and taught several students for master's and bachelor's final projects

## LANGUAGE SKILLS:

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- English: TOEFL iBT Score: 103 out of 120 | Test Date: December 04, 2021  
-Reading: 26      -Listening: 29      -Speaking: 24      -Writing: 24
- Persian: Native
- Turkish: I can speak ( family language )

## SKILLS:

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|----------|-----------------|--------------|----------------|-----------------|
| • Python | • Pytorch       | • Keras      | • Tensorflow   | • scikit- learn |
| • Pandas | • OpenCV        | • Matplotlib | • Numpy        | • Scipy         |
| • NLP    | • Machin vision | • Chatbots   | • Datapielines | • Matlab        |
| • Django | • Flask         | • C++        | • SQL          | • AWS           |

## COURSES:

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- Neural Networks and Deep Learning
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization, and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks
- Sequence Models
- Mathematics for Machine Learning: Linear Algebra
- Mathematics for Machine Learning: Multivariate Calculus
- Mathematics for Machine Learning: PCA
- Become a Probability Statistics Master