

## Fereshteh Khodadadi Shoushtari

- 1-Quantitative Medical Imaging / Spectroscopy Group, Tehran University of Medical Science, Tehran, Iran.
- 2-Nuclear Engineering Department, Shiraz University, Shiraz, Iran.

# **Applicant Information:**

Email: fereshteh.khodadadi387@yahoo.com

Date of birth: 6/10/1994

#### About me:

• In 2020 I started in the field of deep learning with attended a workshop on artificial intelligence in neuroradiology (Tehran brain mapping laboratory) using MATLAB and I became interested in this field. The title of the master's thesis: is "Localization and Segmentation of Glioma Brain Tumors in MR Images Using Deep Learning Algorithm", and I defended the thesis in February 2021, since 2021, I started collaboration and internship with QMISG in the artificial intelligence team using Python in medical imaging.

#### **Education:**

• Master of Science, nuclear engineering-medical radiation

University: Shiraz University

Bachelor's degree in nuclear physics

University: Payame Noor Ahvaz

## **Experience:**

- Deep learning training workshop instructor in MATLAB for 6 sessions (18 hours) in cooperation with the Scientific Association of Shiraz University, Department of Nuclear Engineering.
- Deep learning workshop instructor for medical and non-medical data and image analysis for 8 sessions (24 hours) in collaboration with Aval Algorithm Group under the supervision of Shiraz University.

# **Skills:**

Image Processing ☑	Semantic segmentation in  Deeplearning	Microsoft Office ☑
FSL☑	Classifiction in deeplearning (CNN)  ✓	Gate (Monte Carlo Simulation) ✓
SPSS☑	Object detection in deep ☑ learning(RCNN,FasterRCNN,YOLO)	MATLAB☑
3Dslicer ☑		Python☑

### Language:

listening skills	speaking skills	writing skills	Reading skills	Title
<b>☆★★★★</b>	☆☆★★★	☆☆★★★	<b>☆★★★</b>	English

# **Professional Training:**

- •MATLAB certificate in radiation sciences from the Radiation Sensing Company
- •Certificate of participation in conferences related to deep learning science and MRI images in Tehran brain mapping
- •Certificate of researcher training courses for brain mapping, treatment planning
- •Certificate of advanced training course in radiation protection for medical centers and...
- •Participation in two Sabzevar radiology conferences and the international congress of advanced technologies in the field of health with the use of artificial intelligence in medicine.

Certificates of the end of the course are attached in the attached link.

## Projects:

- Alzheimer's diagnosis using deep learning
- Classification and diagnosis of kidney stones in Ultra-Low-Dose CT images and generation of High Dose images from Low Dose
- Diagnosis of breast diseases mammography images using deep learning
- Prediction of dose distribution in breast cancer treatment planning
- Participation in image processing and implementation of deep learning tasks for brachytherapy CT images in Cervix treatment planning(3dslicer)
- •Segmentation of tumor, cyst, and calcification of mammography images
- •Deep learning and machine learning projects to classify benign and malignant prostate and breast cancer
- •Segmentation of glioma brain tumors and medical image processing

#### **Publications:**

- 1- A Comparison of Deep Learning and Pharmacokinetic Model Selection Methods in Segmentation of High-Grade Glioma magiran.com/p2268493
  - 2- Design and Fabrication of A Pediatric Thyroid Phantom For Use in Radio-Iodine Uptake Measurement, Image Quality Control and Dosimetry
  - DOI: 10.1093/rpd/ncac027
    - 3- Automatic segmentation of glioblastoma multiform brain tumor in MRI images: Using Deeplabv3+ with pretrained Resnet18 weights
  - DOI: 10.1016/j.ejmp.2022.06.007
  - 4- Synthesis of Prospective Multiple Time Points F-18 FDG PET Images from a Single Scan Using a Supervised Generative Adversarial Network
  - DOI: 10.1055/a-2026-0784

Attached file of certificates: