Sogand Sadeghi

Medical Physics

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Ph.D. student in Physics. I'm doing my thesis on Dose Evaluation in Radiation Therapy Treatment Planning in Patients with Glioblastoma Multiform Cancer using Contouring Method based on Multiparametric MRI and comparing the results with calculating dose distribution on a GBM patient by treatment planning system Dose-Volume histogram.

I'm interested in searching on different types of deep learning and neural networks to process medical images to have qualified treatment in different types of cancer in radiotherapy.

Educations

- February 2017 - present

Ph.D. of Science in Physics –Medical Physics/Biomedical Physics

Mazandaran University, Mazandaran, Islamic Republic of Iran

Thesis title: Dose Evaluation in Radiation Therapy Treatment Planning in Patients with Glioblastoma Multiform Cancer using Contouring Method based on Multiparametric MRI

- January 2010 - February 2012

Master of Science in Physics –Particle Physics

Central Tehran Branch of Islamic Azad University, Tehran, Islamic Republic of Iran

Dissertation title: Baryons confinement in vertex theory

- September 2006 - January 2010

Bachelor of Science degree in Physics

Hakim Sabzevari University , Islamic Republic of Iran

- September 2005 - September2006

Pre-university diploma of Experimental science

Pre-university school, Tonekabon, Islamic Republic of Iran

Certifications

- February 2019

Certificate of attendance in West Asia Cancer Congress, Tehran, Iran

- July 2018

Certificate of participation in Digital Radiographic System Quality Control in 2- hour workshop in the 12th Iranian congress of Medical Physics at Shahid Beheshti University of Medical science, Tehran, Iran

- July 2018

Certificate of participation in the 12th Iranian congress of Medical Physics at Shahid Beheshti University of Medical science, Tehran, Iran

- July 2018

Certificate of participation in Radiotherapy Treatment Design in 4- hour workshop in the 12th Iranian congress of Medical Physics at Tehran University of Medical science, Tehran, Iran

- July 2018

Certificate of participation in FMRI Analysis in 4- hour workshop in the 12th Iranian congress of Medical Physics at Shahid Beheshti University of Medical science, Tehran, Iran

- July 2018

Certificate of participation in Digital Radiographic System Quality Control in 2- hour workshop in the 12th Iranian congress of Medical Physics at Tehran University of Medical science, Tehran, Iran

- July 2018

Certificate of participation in Quality Control of Nuclear Medicine in 2- hour workshop in the 12th Iranian congress of Medical Physics at Tehran University of Medical science, Tehran, Iran

- July 2018

Certificate of participation in Absolute and Relative Dosimetry in 2- hour workshop in the 12th Iranian congress of Medical Physics at Tehran University of Medical science, Tehran, Iran

- July 2018

Acknowledgment of contribution, effort, accountability and effective activities as the executive committee of the 12th Iranian Congress of Medical Physics at Shahid Beheshti University of Medical science, Tehran, Iran

- March 2018

Certificate of attendance in 24th Iranian Congress of Nuclear Engineering, Isfahan, Iran

Experience

- May 2019 - December 2019

Summer school and workshop on data science, IPM, Tehran, Iran

- December 2018 - May 2019

Training treatment planning system and Radiotherapy on ELECTA radiotherapy device in Imam Khomeini Hospital Complex Hospital, Tehran, Iran

- May 2018

Summer school and workshop on Python and Latex, Shahid Beheshti University, Tehran, Iran

- 2015-2017

2 years of experience in teaching English in Salam and Simia institute, Tehran, Iran

- 2015-2017

2 years of experience in teaching Physics in East Tehran Branch of Islamic Azad University, Tehran, Islamic Republic of Iran

Language

English/ TTC & MSRT/Academic Experience

Persian/ Native

Software

Python Programming Language

Matlab Programming Language

ICDL

3DSlicer

SPSS

Skills

Treatment planning for different cancers by Treatment Planning System Software

Working with Radiotherapy System devices

Researching on CT- images processing by Deep Learning algorithms and qualifying images

Calculation Dose distribution uniformity

Data Science, Machine Learning, Deep Learning, Medical Image Analysis

Educational Interests

Treatment planning for different cancers

Working with Radiotherapy System devices

Image processing by Deep Learning algorithms

Calculation Dose distribution uniformity

CT simulations