

# Leila Ghorbanzadeh

541-243-4062

[ghorbanl@oregonstate.edu](mailto:ghorbanl@oregonstate.edu)

<https://www.linkedin.com/in/leila-ghorbanzadeh-a2972b87/>

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## Education

### Doctor of Philosophy in Electrical Engineering

2016-Present

Oregon State University, Corvallis, OR

GPA: 3.8

### Master of Science in Nuclear Engineering

2011-2014

### Minor in Electrical Engineering

Graduate University of Advanced Technology, Kerman, Iran

GPA: 3.78/4

### Bachelor of Science in Electrical Engineering

2007-2011

University of Tabriz, Tabriz, Iran

GPA: 3.21/4 (last two years)

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## Research Interests

- Renewable Energy Systems
  - Control and Signal Processing
  - Robotics
  - Deep Learning
  - Power System and Smart Grid
  - Adaptive Neuro-Fuzzy Prediction Model
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## Publications Articles:

- **Leila Ghorbanzadeh**, Ahmad Esmaili Torshabi “Development of a Synthetic Adaptive Neuro-Fuzzy Prediction Model for Tumor Motion Tracking in External Radiotherapy by Evaluating Various Data Clustering Algorithms”, Technology in Cancer Research and Treatment, 2015 Mar 1 2. DOI:153 3034 6155 711 53. [view article](#)
- Ahmad Esmaili Torshabi, **Leila Ghorbanzadeh** “A Study on Stereoscopic X-ray Imaging Dataset on the Accuracy of Real Time Tumor Tracking at External Surrogates Radiotherapy”, Technology in Cancer Research and Treatment, 2017, Vol. 16 (2) 167– 177. DOI: 10. 1177 /15 3303 461 6638 803. [view article](#)
- **Leila Ghorbanzadeh**, Ahmad Esmaili Torshabi “A Method for Brain Tumor Delineation Using Adaptive Neuro-Fuzzy Inference System in Combination with Expectation-Maximization Clustering; a Feasibility Study”, Frontiers in Biomedical Technologies 3 (1-2), 8-19. [view article](#)

## Book Chapter

- Ahmad Esmaili Torshabi, **Leila Ghorbanzadeh**, Payam Samadi, Saber Nankali “The Physical Principles of Radio Therapy Of Dynamic Tumors” (Under preparation in Persian)

## Presentations

- **Leila Ghorbanzadeh**, Ahmad Esmaili Torshabi “Medical Image Segmentation and Tumor Definition Using Clustering Algorithms” 11th Medical Physics Conference of Iran, (oral presentation) 5.2014
- Ahmad Esmaili Torshabi, **Leila Ghorbanzadeh**, Saber Nankali “Different Aspects of Fuzzy Logic in IGRT”, 11th Medical Physics Conference of Iran (oral presentation) 5.2014

## Working Experiences

- **Graduate Student Researcher** 2016-current  
Oregon State University, Corvallis, OR  
Decentralized hierarchical control, and power electronics for the purpose of reliable large-scale conversion of ocean wave energy.
- **Graduate Research Assistant** 2012-2014  
Graduate University of Advanced Technology, Kerman, Iran  
Development of a synthetic adaptive neuro-fuzzy prediction model for tumor motion tracking in external radiotherapy
- **Medical image processing**  
Training Course 12.2014–03.2015  
Diagnostic Imaging Center, Marand, Iran  
Medical Imaging
- **Undergraduate senior design project** 2011-2012  
University of Tabriz, Tabriz, Iran  
Design and Implementation of Kalman Filter on Microcontrollers
- **Student Internship** 07.2011-09.2011  
Kosar Electronic Company, Tabriz, Iran  
Installation and Commissioning of BTS Sites

## Teaching Assistantship

- **Graduate Teaching Assistant** Fall 2016-Present  
Oregon State University, Corvallis, Oregon
  - ✓ Linear System Theory
  - ✓ Communication Systems
  - ✓ Probability, Statistics, and Random Processes for Electrical Engineering
  - ✓ Electrical Fundamental s II
- **University Lecturer** 2014-2016  
Azad University, Marand, Iran
  - ✓ Lecturer in Mathematics II
  - ✓ Lecturer in Physics I & II

## Software and Skills

- **Programming**  
MATLAB, C, Python, Monte Carlo codes FLUKA and MCNPX  
Microsoft Office
- **Personality**  
Self-Motivated, Team Player, Goal-Oriented

## Graduate Courses

Intelligent Agents and Decision Making, Contemporary Energy Applications, Deep Learning, Linear Systems, Dynamics of Electromechanical Energy Conversion, Stochastic Signals and Systems, Applications, Estimation, Filtering and Detection, Digital Signal Processing, Smart Grid, Dynamical systems theory and Power Electronics.