

# Naji Khosravan

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## Education

Sep.2015 – Present **Ph.D student in Computer Science**

CRCV|Center for Research in Computer Vision, University of Central Florida, FL, USA

Sep.2010 – 2015 **B.Sc. in Electrical Engineering**

Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran

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## Fields of Interest

- Computer Vision
  - Detection
  - Segmentation
- Machine Learning
  - Deep Learning
  - Reinforcement Learning
- Medical Image analysis

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## Publication & Technical Reports

- 2018 **A Collaborative Computer Aided Diagnosis (C-CAD) System with Eye-Tracking, Sparse Attentional Model, and Deep Learning**, N. Khosravan, H. Celik, B. Turkbey, E. Jones, B. Wood, U. Bagci. *Medical Image Analysis journal (MedIA)*, 2018. (Accepted with minor revision)
- 2018 **S4ND: Single-Shot Single-Scale Lung Nodule Detection**, N. Khosravan, U. Bagci. *21st International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)*, Granada, Spain, 2018.
- 2018 **Semi-supervised multi-task learning for lung cancer screening**, N. Khosravan, U. Bagci. *IEEE International Engineering in Medicine and Biology Conference (EMBC)*, Honolulu, Hawai'i, USA, 2018.
- 2018 **How deep can hand crafted features be?**, N. Khosravan, W. L. Richey, U. Bagci. *IEEE International Engineering in Medicine and Biology Conference (EMBC)*, Honolulu, Hawai'i, USA, 2018.
- 2018 **Deep Learning Beyond Cats and Dogs: Recent Advances in Diagnosis Breast Cancer with Deep Neural Networks**, J. R. Burt, N. Torosdagli, N. Khosravan, H. RaviPrakash, A. Mortazi, C. Rogers, F. Tissavirasingham, S. Hussein, U. Bagci. *British Journal of Radiology (BJR)*, 2018.
- 2017 **Eye Tracking System for Prostate Cancer Diagnosis Using Multi-Parametric MRI**, H. Celik, B. Turkbey, P. Choyke, R. Cheng, E. McCreedy, M. McAuliffe, N. Khosravan, U. Bagci, B. Wood. *Conference of International Society for Magnetic Resonance in Medicine (ISMRM)*, Honolulu, Hawai'i, USA, 2017.

- 2016 **Gaze2Segment: A Pilot Study for Integrating Eye-Tracking Technology into Medical Image Segmentation**, N. Khosravan, H. Celik, B. Turkbey, R. Cheng, E. McCreedy, M. McAuliffe, S. Bednarova, E. Jones, X. Chen, P. L. Choyke, B. J. Wood, U. Bagci. *Medical Computer Vision, International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI), Athens Greece, 2016.*
- 2016 **Improved Classification of Lung Nodules via Integrated Deep Learning and Hand-Crafted Features**, N. Khosravan, W. L. Richey, U. Bagci. *Technical report for NSF's Research Experience for Undergraduates (REU) program at CRCV.*

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## Research Experience & Academic Activities

### Research experience

- Since 2015 **Research Assistant at Center for Research in Computer Vision (CRCV)**, Department Of Computer Science, University of Central Florida.
- 2013 – 2015 **Research Assistant at Real-Time Lab**, Department Of Electrical Engineering, Amirkabir University of Technology (Tehran polytechnic), Tehran, Iran.
- 2013 – 2015 **Research Assistant at AIMS Lab**, Department Of Electrical Engineering, Amirkabir University of Technology (Tehran polytechnic), Tehran, Iran.

### Teaching experience

- Fall 2015-Fall 2017 **Teaching Assistant**, Department Of Computer Science, UCF. **Courses:** Robot vision, Database design, Javascript Programming, Introduction to C++, Concepts in Computer Science.
- Summer 2016 **Mentor**, Center for Research in Computer Vision (CRCV). **Program:** Research Experience for Undergraduates (REU) supported by NSF.

### Reviews

- Since 2016 **Reviewer for:** Medical Image Analysis Journal, Medical Physics Journal, IEEE International Symposium on Biomedical Imaging (ISBI), International Conference on Image Processing Theory, Tools and Applications (IPTA), Eye Tracking Research & Applications Symposium (ETRA).

### Internship

- Summer 2018 **Netflix, CA, USA**, I have joined Cloud Media Systems research team at Netflix as a Computer Vision research scientist.
- Summer 2013 **Telecommunication Company of Iran (TCI)**, This company is The First and the most prestigious telecommunication company in Iran.

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## Selected Academic Courses

- o 3D Computer Vision, Advanced Computer Vision, Machine Learning, Medical Image Analysis, Numerical Analysis
- Sep. 2013 Workshop on Image Processing by MATLAB (30 hours) **Certificated from Amirkabir University of Technology (Tehran Polytechnic).**

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## Skills

### Computer skills

Programming: Python, MATLAB, some experience with C++ and Javascript

Engineering Softwares: Amira, 3D Slider, ITKSnap, FIJI, MATLAB Simulink and Image Processing toolboxes

Libraries and toolboxes: Tensorflow(deep learning)

Operating Systems: Linux (Ubuntu user), Mac (OS X user), Microsoft Windows

### Language Skills

English: Fluent

TOEFL: Reading:25, Listening:27, Speaking:27, Writing:28, Total:107

Persian: Native