# Ehsan Hosseini-Asl

## PERSONAL DATA

PERSONAL WEBSITE: ehosseiniasl.com

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EMAIL: ehsan.hosseiniasl@gmail.com

#### **EDUCATION**

2012-2016 PhD in Electrical and Computer Engineering

University of Louisville, USA

Research: Machine Learning/Deep Learning

Dissertation: Sparse Feature Learning for Image Analysis in Segmentation,

Classification and Disease Diagnosis

Advisor: Dr. Ayman EL-BAZ

### RESEARCH EXPERIENCE

MARCH 2017-PRESENT

Salesforce Al Research, San Francisco Bay Area
Senior Research Scientist - Deep learning, NLP, Dialogue, Speech, Computer Vision

## HONORS AND AWARDS

2020 NeurIPS 2020 spotlight paper

2019 ACL 2019 Outstanding Paper Award

Best Paper Award (cross-submission), ACL workshop on "NLP for Conversational AI"

The Best and Outstanding PhD Dissertation Award (John M. Houchens Prize) School of Interdisciplinary and Graduate Studies, University of Louisville

2016 Graduate Dean's Citation

School of Interdisciplinary and Graduate Studies, University of Louisville

2015 Graduate Student Research grant from IEEE Computational Intelligence Society, "Part-based Representation of Data In Deep Learning Models"

#### Selected Conference papers

- Ehsan Hosseini-Asl, Wenhao Liu, Caimin Xiong, "A Generative Language Model For Few-Shot Aspect-Based Sentiment Analysis", Findings of NAACL, 2022
- Tianxing He, B. MacCann, Caiming Xiong, E. Hosseini-Asl, "Joint Energy-based Model Training for Better Calibrated Natural Language Understanding Models", EACL, 2021
- -E. Hosseini-Asl, B. MacCann, CS. Wu, S. Yavuz, R. Socher, "A Simple Language Model For Task Oriented Dialogue", NeurIPS (Spotlight), 2020
- E. Hosseini-Asl, Y. Zhou, C. Xiong, R. Socher, "Augmented Cyclic Adversarial Learning for Low Resource Domain Adaptation", ICLR 2019
  - CS. Wu, A. Madotto, E. Hosseini-Asl, , C. Xiong, R. Socher, P. Fung, "Transferable Multi-Domain State Generator for Task-Oriented Dialogue Systems", ACL 2019, Outstaing Paper Award, 2019
- E. Hosseini-Asl, Y. Zhou, C. Xiong, R. Socher, "A Multi-Discriminator Cyclegan for Unsupervised Non-parallel Speech Domain Adaptation", INTERSPEECH 2018
  - E. Nouri, **E. Hosseini-Asl**, "Toward Scalable Neural Dialogue State Tracking", NeurIPS 2018, 2nd Conversational AI worshop, 2018

# **SELECTED JOURNALS**

- E. Hosseini-Asl, M., Ghazal, A., Mahmoud, A., Aslantas, A.M., Shalaby, M.F., Casanova, G.N., Barnes, G., Gimel'farb, R., Keynton and A., El-Baz, "Alzheimer's disease diagnostics by a 3D deeply supervised adaptable convolutional network." Frontiers in bioscience (Landmark edition), 23, p.584., 2018
- E. Hosseini-Asl, J. M. Zurada, O. Nasraoui, "Deep Learning of Part-based Representation of Data Using Sparse Autoencoders with Nonnegativity Constraints", Neural Networks and Learning Systems, IEEE Trans. on, vol.PP, no.99, pp.1-13, 2015.
  E. Hosseini-Asl, J. M. Zurada, Georgy Gimel'farb, and A. El-Baz, "3D Lung Segmentation Using Incremental Constrained Nonnegative Matrix Factorization," Biomedical Engineering, IEEE Trans. on, vol.PP, no.99, pp.1-1, 2015.

## **CONFERENCE PUBLICATIONS**

- M. Ismail, G. Barnes, M. Nitzken, A. E. Switala, A. Shalaby, E. Hosseini-Asl, M. Casanova, R. Keynton A. El-Baz, "A New Deep Learning Based CAD system for Early Diagnosis of Autism Using Structural MRI", submitted to International Symposium on Biomedical Imaging, (ISBI), 2017.
- M. Shehata et al., "A new non-invasive approach for early classification of renal rejection types using diffusion-weighted MRI," 2016 IEEE International Conference on Image Processing (ICIP), Phoenix, AZ, 2016, pp. 136-140.
  - **E. Hosseini-Asl**, R. Keynton, and A. El-Baz, "Alzheimer's Disease Diagnosis by Adaptation of 3D Convolutional Network", Image Processing (ICIP), 2016 IEEE Int. Conference on, pp. 126-130, 2016.
  - I. Reda, A. Shalaby, M. Abou El-Ghar, F. Khalifa, M. Elmogy, A. Aboulfotouh, **E. Hosseini-Asl**, A. El-Baz, and R. Keynton, "A New NMF-Autoencoder Based CAD System For Early Diagnosis of Prostate Cancer", in Biomedical Imaging (ISBI), 13th IEEE Int. Symposium on, pp. 1237-1240, 2016.
- E. Hosseini-Asl, and J. M. Zurada, and Ayman El-baz, "Automatic Segmentation of Pathological Lung Using Incremental Nonnegative Matrix Factorization", in Image Processing (ICIP), 2015 IEEE Int. Conference on, Quebec City, Canada, September 27-30, pp.3111-3115, 2015.
- E. Hosseini-Asl, and J. M. Zurada, and Ayman El-baz, "Lung Segmentation Based on Nonnegative Matrix Factorization," in Image Processing (ICIP), 2014 IEEE Int. Conference on, Paris, France, Oct 2014, pp. 877-881
- 2009 **Hossaini-asl, E.**; Shahbazian, M. "Nonlinear dynamic system control using wavelet neural network based on sampling theory", IEEE International Conference on Systems, Man and Cybernetics, SMC 2009, Pages: 4502 4507, 2009