

Ali Nasiri

4046 Vista Towers Dr, Columbia, SC 29201
803-414-9839
alireza.nasiry@gmail.com

ACADEMIC BACKGROUND **Ph.D. Computer Science** December 2020
University of South Carolina, Columbia, SC
• Ph.D. research in audio analysis using Machine Learning and Deep Learning methods under direction of Dr. Jianjun Hu.

M.Sc. Computer Science December 2019
University of South Carolina, Columbia, SC

B.Sc. Computer Engineering September 2010
Isfahan University of Technology, Isfahan, Iran

TEACHING EXPERIENCE **Lecturer and Lab Instructor** August 2015 - Present
Course: General Applications Programming
A course in Web Design with HTML/CSS/JavaScript
Department of Computer Science and Engineering, University of South Carolina

TECHNICAL SKILLS **Programming Languages**
Python, C/C++, C#, HTML/CSS/JavaScript, SQL, R

Python Frameworks
Pytorch, Keras, Tensorflow, Scikit-Learn, Pandas, Numpy.

Website Development
Django

Machine Learning / Deep Learning
Classification, Regression, Decision Trees, Random Forest, CNN, RNN, Dense layers
Regularization techniques

PUBLICATIONS Alireza Nasiri, Yuxin Cui, Zhonghao Liu, Jing Jin, Yong Zhao, and Jianjun Hu, “**AudioMask: Robust Sound Event Detection Using Mask R-CNN and Segment-Level Classifier,**” *2019 IEEE 31st International Conference on Tools with Artificial Intelligence (ICTAI)*, Portland, OR, USA, pp. 485-492, 2019.

Alireza Nasiri, Jingjing Bao, Donald Mccleary, Steph-Yves M. Louis, Xinyu Huang and Jianjun Hu, “**Online Damage Monitoring of SiCf-SiCm Composite Materials Using Acoustic Emission and Deep Learning,**” in *IEEE Access*, vol. 7, pp. 140534-140541, 2019.

Steph-Yves M. Louis, Alireza Nasiri, Jingjing Bao, Donald Mccleary, Xinyu Huang and Jianjun Hu, “**Remaining Useful Strength (RUS) Prediction of SiCf-SiCm Composite Materials Using Deep Learning and Acoustic Emission,**” *Applied Sciences* 10, no. 8, pp. 2076-3417, 2020.

Zhonghao Liu, Yuxin Cui, Zheng Xiong, Alireza Nasiri, Ansi Zhang, and Jianjun Hu,

“DeepSeqPan, a novel deep convolutional neural network model for pan-specific class I HLA-peptide binding affinity prediction,” *Scientific Reports* 9, no. 1, pp. 1-10, 2019.

Zhonghao Liu, Jing Jin, Yuxin Cui, Zheng Xiong, Alireza Nasiri, Yong Zhao, and Jianjun Hu, **“DeepSeqPanII: an interpretable recurrent neural network model with attention mechanism for peptide-HLA class II binding prediction,”** *bioRxiv*: 817502, 2019.

Jing Jin, Zhonghao Liu, Alireza Nasiri, Yuxin Cui, STEPH-YVES M Louis, Ansi Zhang, Yong Zhao, and Jianjun Hu, **“Attention mechanism-based deep learning pan-specific model for interpretable MHC-I peptide binding prediction,”** *bioRxiv*: 830737, 2019.

Yuqi Song, Joseph Lindsay, Yong Zhao, Alireza Nasiri, Steph-Yves Loius, Jie Ling, Ming Hu, and Jianjun Hu. **“Machine Learning based prediction of non-centrosymmetric crystal materials,”** *Computational Materials Science* 183, p. 109792, 2020.

Steph-Yves Louis, Yong Zhao, Alireza Nasiri, Xiran Wong, Yuqi Song, Fei Liu, and Jianjun Hu. **“Global Attention based Graph Convolutional Neural Networks for Improved Materials Property Prediction.”**, *Physical Chemistry Chemical Physics*, 2020.

PROJECTS

Design and implementation of a dynamic Website as a database for uploading materials images and properties, 2018.

Design and implementation of a simple compiler, 2017, as Compiler Design project.

ACADEMIC SERVICES

Reviewer

Reviewed papers for IEEE Access and PLOS ONE journals

AWARDS

Second place in UofSC National Big Data Health Science Conference Case Competition 2020

LANGUAGES

Azerbaijani (Native), Farsi (Native), English (Fluent), Turkish (Fluent), Arabic (Basic)