

# Sharif Amit Kamran

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EDUCATION	<b>PhD. in Computer Science and Engineering</b> University of Nevada, Reno	<b>CGPA:</b> 3.5 / 4.0 Aug 2019 – Present
	<b>Bsc. in Computer Science and Engineering</b> BRAC University, Bangladesh	<b>CGPA:</b> 3.45 / 4.0 Jan 2013 – Apr 2017
EXPERIENCE	<b>Graduate Research Assistant</b> , University of Nevada, Reno <i>Department of Computer Science and UNR school of Medicine</i>	Aug 2019 – Present
	<b>Co-Founder</b> , Bengali.AI <i>Dhaka, Bangladesh</i>	Apr 2018 – Present
	<b>Deep Learning Engineer</b> , SkinIQ Inc. <i>Palo Alto, California, U.S.</i>	May 2018 – Jun 2019
	<b>Researcher</b> , Center for Cognitive Skill Enhancement <i>Independent University Bangladesh (IUB), Dhaka, Bangladesh.</i>	May 2017 – Jun 2019
RESEARCH INTEREST	My research interest lies in the intersection of Computer Vision, Deep Learning, and Medical Image Processing. Most of my research involves Supervised and Unsupervised algorithms for Image Classification, Semantic Segmentation, etc. Quite recently, I have been working on improving robustness, image synthesis, and image denoising using GAN on different modalities of Ophthalmological and Calcium imaging data.	
ACADEMIC SERVICES	<b>Mentor</b>	Jun 2020 – Aug 2020
	<ul style="list-style-type: none"><li>■ Research &amp; Engineering Apprenticeship Program (REAP)</li><li>■ under Army Educational Outreach Program (AEOP)</li></ul>	
PUBLICATIONS	<b>BOOK CHAPTER</b>	
	[1] A Comprehensive Set of Novel Residual Blocks for Deep Learning Architectures for Diagnosis of Retinal Diseases from Optical Coherence Tomography Images, 2020, <i>Book Chapter, in Deep Learning Vol 2., Springer Nature.</i>	
	<b>JOURNALS</b>	
	[1] A High Throughput Machine-Learning Driven Analysis of Ca <sup>2+</sup> Spatio-temporal Maps, 2020, in <i>Cell Calcium</i> , 91, p.102260	
	[2] Denoising Calcium Signals (Spatial-temporal Maps) using Mathematical Noise Modeling, in <i>IScience</i> . <b>Submitted</b>	
	[3] Fundus2Angio: A Novel Conditional GAN Architecture for Generating Fluorescein Angiography Images from Retinal Fundus Photography in <i>Scientific Reports</i> . <b>Submitted</b>	
	<b>CONFERENCES</b>	
	[1] Attention2AngioGAN: Synthesizing Fluorescein Angiography from Retinal Fundus Images using Generative Adversarial Networks, in <i>25th IEEE International Conference on Pattern Recognition 2020 (ICPR)</i> . <b>Submitted</b>	

- [2] Improving Robustness using Joint Attention Network For Detecting Retinal Degeneration From Optical Coherence Tomography Images in *27th IEEE International Conference on Image Processing 2020 (ICIP)*.
- [3] Optic-Net: A Novel Convolutional Neural Network for Diagnosis of Retinal Diseases from Optical Tomography Images, in *18th IEEE International Conference on Machine Learning and Applications 2019 (ICMLA)*.
- [4] Total Recall: Understanding Traffic Signs using Deep Hierarchical Convolutional Neural Networks, in *21st IEEE International Conference on Computer and Information Technology 2018 (ICCIT)*
- [5] Efficient Yet Deep Convolutional Neural Networks for Semantic Segmentation, in *IEEE International Symposium on Advanced Intelligent Informatics 2018 (SAIN)*

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**AWARDS &  
HONORS**

- **Graduate Dean's Merit Scholarship,** Aug 2019 – May 2020  
Fall 2019 and Spring 2020
  - **Best Paper Award,** Aug 2018  
2018 International Symposium on Advanced Intelligent Informatics (SAIN)
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**REVIEWER**

- **Journal:** IJAIT, Sensors
  - **Conference:** BMVC 2020, ICRA 2019, CVCi 2020, IVSP 2020
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**SKILLS**

**Programming Languages and Libraries**

- C++, Python, Java, Bash (Unix Shell Scripting), Matlab
- OpenCV, Scikit-learn, Numpy, Pandas, Caffe, Keras, Tensorflow, PyTorch, CoreML, Google Cloud Platform.