Sharif Amit Kamran

skamran@nevada.unr.edu • +(1) 929-418-7223 • www.sharifamit.com • Github:SharifAmit

EDUCATION

PhD. in Computer Science and Engineering — **CGPA**: 3.5 / 4.0
University of Nevada, Reno — Aug 2019 – Present

Bsc. in Computer Science and Engineering — **CGPA**: 3.45 / 4.0
BRAC University, Bangladesh — Jan 2013 – Apr 2017

SELECTED PUBLICATIONS

- Improving Robustness using Joint Attention Network For Detecting Retinal Degeneration From Optical Coherence Tomography Images in *27th International Conference on Image Processing 2020 (ICIP).*
- A High Throughput Machine-Learning Driven Analysis of Ca 2+ Spatio-temporal Maps, 2020, in *Cell Calcium, 91*, p.102260
- Attention2AngioGAN: Synthesizing Fluorescein Angiography from Retinal Fundus Images using Generative Adversarial Networks in *25th International Conference on Pattern Recognition (ICPR).*

** For full list of publications: **(Link)**

WORK EXPERIENCE

Graduate Research Assistant, University of Nevada, Reno — Aug 2019 – Present
Department of Computer Science and UNR school of Medicine

Co-Founder, Bengali.AI — Apr 2018 – Present
Dhaka, Bangladesh

Mentor, Research & Engineering Apprenticeship Program (REAP) — Jun 2020 – Aug 2020
US Army Educational Outreach Program

Researcher, Center for Cognitive Skill Enhancement — May 2017 – Jun 2019
Independent University Bangladesh (IUB), Dhaka, Bangladesh.

SKILLS

- **Programming Languages:** C++, Python, Java, Bash (Shell Scripting), Matlab, HTML-CSS, Git, PHP
- **Libraries:** OpenCV, Scikit-learn, Numpy, Caffe, Keras, Tensorflow, PyTorch, CoreML, ImageJ.
- **Systems:** Linux OS, Google Cloud Platform (Compute Engine & App Engine)

PROJECTS

Retinal Image Synthesis using Generative Adversarial Networks
- Implemented an attention-based generative adversarial networks for synthesizing Fluroscien Angiography from Retinal Fundus Photography.

Calcium ST-Maps Generation, Denoising and Segmentation using deep learning
- Created a pipeline for Ca2+ spatio-temporal map generation, denoising and segmentation using deep learning.

Traffic Sign Recognition using Residual Convolutional Neural Network
- Achieved state-of-the-art results for road traffic sign recognition using deep residual neural network network for German and Belgian Traffic sign data-set.

Semantic Segmentation using Fully Convolutional Neural Networks (FCN)
- Implemented a FCN using dilated convolution and multi-scale skip connections for semantic segmentation and participated in University of Oxford's Pascal-VOC 2012 challenge.

ACADEMIC SERVICES

Reviewer — 2019 – Present
- BMVC-2020, WACV-2020, ICRA-2019, Sensors, IJAIT

Graduate Teaching Assistant — Jan 2020 – May 2020
- CS491/CS691 Deep Learning

SELECTED COURSEWORK

Deep Learning, Machine Learning, Computer Vision, Algorithms, Ophthalmic Visual Computing, Applied Computer Vision, Image Processing

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)