

PUBLICATIONS

Journal Articles

- Masud An Nur Fahim, Nazmus Saqib, **Shafkat Khan Siam**, Ho Yub Jung, *Rethinking Gradient Weight's Influence over Saliency Map Estimation*, MDPI, Sensors, 22 (17), 6516, 2022.

DOI: 10.3390/s22176516

Description: We have developed a novel CAM-based method for deep neural network interpretability. Our method uses a global guidance map to produce more precise and specific saliency visualizations. We evaluated our method on three datasets and outperformed nine existing methods.

- Masud An Nur Fahim, Nazmus Saqib, **Shafkat Khan Siam**, Ho Yub Jung, *Denoising Single Images by Feature Ensemble Revisited*, MDPI, Sensors, 22 (18), 7080, 2022.

DOI: 10.3390/s22187080

Description: We have proposed a new architecture for image denoising that uses modular concatenation instead of deep cascades. Our method preserves spatial fidelity and avoids cartoon-like smoothing. Our method has fewer parameters than most existing methods and achieves better performance on three datasets.

LANGUAGES AND TECHNOLOGIES

- **Programming Languages:** Python, C, C++, MATLAB
- **Machine Learning Tools:** Tensorflow, Keras, PyTorch, scikit-learn
- **Framework:** Arduino
- **SCB:** Raspberry Pi
- **PCB/Circuit design:** Proteus

STANDARDIZED TEST SCORES

- **International English Language Testing System (IELTS): 07-Oct-2023**

Overall	Listening	Reading	Writing	Speaking
7.5	8.5	8.0	6.5	6.5

- **Graduate Record Examinations (GRE): 12-Oct-2020**

Quantitative Reasoning	Verbal Reasoning	Analytical Writing
162	147	3.5

VOLUNTEERING ACTIVITIES

- **Committee Member**, Manipulators of Electrons Club (Nov 2017 - Mar 2019)
- **Co-founder**, Innovation and Research Association for Students (IRAS) - KUET, (Jul 2018 - Mar 2019)
- **Organizer**: Technival 2019 (nationwide technical fest)