A F M Saifuddin Saif, PhD

1. Artificial Intelligence
2. Computer Vision
3. Machine Learning
4. Image processing
5. Augmented Reality
6. Virtual Reality

Undergraduate	Graduate
1. Artificial Intelligence	1. Computer Vision
2. Computer Vision	2. Computer Vision and Pattern Recognition
3. Theory of Computation	3. Image Processing
4. Analysis of Algorithms	4. Machine Learning and Neural Network
5. Research Methodology	5. Data-Driven Decision-Making
6. Computer System	6. Enterprise Systems
7. Secure Software Development	7. Research Methodology

Position: Assistant Professor
Department of Computer Science and Information Systems,
West Virginia University Institute of Technology.

Position: Visiting Assistant Professor for Artificial Intelligence and Data Science
College of Science, Technology, Engineering, and Mathematics,
Colorado State University Pueblo, Colorado, USA

Position: Postdoctoral Researcher
School of Engineering,
Aalto University, Finland

Position: Faculty Member
Laurea University of Applied Sciences, Helsinki, Finland

Position: Senior Lecturer
Institute of IR4.0,
Universiti Kebangsaan Malaysia (The National University of Malaysia)

Position: Postdoctoral Researcher
Department of Computer Science,
University of Helsinki, Finland

Position: Senior Assistant Professor
Department of Computer Science,
American International University – Bangladesh

Position: Assistant Professor
Department of Computer Science,
American International University – Bangladesh

Position: Head of the Research Group
AIUB Brain Engineering Research Team (ABERT)
Department of Computer Science,

American International University – Bangladesh

Position: Graduate Research Assistant
Center for Artificial Intelligence and Technology (CAIT),
Department of Industrial Computing,
Faculty of Information Science and Technology.
University Kebangsaan Malaysia (The National University of Malaysia)

Position: Graduate Research Assistant
Center for Artificial Intelligence and Technology (CAIT),
Department of Industrial Computing,
Faculty of Information Science and Technology.
University Kebangsaan Malaysia (The National University of Malaysia)

Qualification

Doctor of Philosophy (PhD)
Center for Artificial Intelligence and Technology (CAIT),
Department of Industrial Computing,
Faculty of Information Science and Technology (FTSM),
The National University of Malaysia

Master of Science in Computer System Engineering (Software System)
School of Architecture, Computing and Engineering (ACE),
University of East London, UK.

Bachelor of Science in Computer Science and Engineering
Department of Computer Science & Engineering.
Shahjalal University of Science and Technology, Bangladesh.

Research Publication (Selected Only)

Journal Articles Published Only

1	2023	Att-BiL-SL: Attention-Based Bi-LSTM and Sequential LSTM for Describing Video in the Textual Formation.(Publication Link)
		Journal Name: International Journal of Advanced Computer Science and Applications (IJACSA).
2	2023	Stereo Vision Based Localization of Handheld Controller in Virtual Reality for 3D Painting Using Inertial System.(Publication Link)
		Journal Name: Journal of Image and Graphics.
3	2022	Vision based 3D Object Detection using Deep Learning: Methods with Challenges and Applications towards Future Directions.(Publication Link)
		Journal Name: International Journal of Advanced Computer Science and Applications(IJACSA).
4	2021	Silhouette Pose Feature based Human Action Classification using Capsule Network. (Publication Link)
		Journal Name: Journal of Information Technology Research (JITR).
5	2021	An Efficient Method for Hand Gesture Recognition Using Robust Features Vector. (Link) Received best paper award in 1st International Postgraduate Seminar on Industrial Revolution 4.0 (IPSIR4.0),2021. (Link)
		Journal Name: Journal Information System and Technology Management (JISTM).
6	2020	A Comprehensive Study of Real-Time Vacant Parking Space Detection Towards the need of a Robust Model(Publication Link)
		Journal Name: AIUB Journal of Science and Engineering (AJSE)
7	2020	m-Naslada: A mobile application for black pepper crop disease information(Publication Link) Received best paper award in International Conference on Engineering and Computing Technology, ICECT,2018.
		Journal Name: Journal of Physics: Conference Series
8	2018	Moving Object Segmentation Using Various Features from Aerial Images: A Review. (Publication Link)

Journal Name: Advanced Science Letters

9 2017 Performance Comparison of Min-Max Normalization on Frontal Face Detection Using Haar Classifiers.(Publication Link)
Journal Name: Pertanika J. Sci. & Technol.

10 2015 Moment Feature Based Fast Feature Extraction Algorithm for Moving Object Detection Using Aerial Images.(Publication Link)
Journal Name: *PLoS ONE*.

11 2014 Moving object detection using dynamic motion modeling from UAV aerial images. Scientific World Journal 2014. (Publication Link)
Journal URL : The Scientific World Journal

12 2014 A Conceptual Framework: Dynamic Path Planning System for Simultaneous Localization and MappingMultirotor UAV. (Publication Link)
Journal Name: Advanced Science Letters.

13 2013 Vision-based human face recognition using extended principal component analysis. (Publication Link)
Journal Name: International Journal of Mobile Computing and Multimedia Communications.

<mark>Book Chapters Published Only</mark>

1 2023 Augmented Reality-Based 3D Human Hands Tracking From Monocular True Images Using Convolutional Neural Network.(Publication Link)
Received best paper award in International Conference on Applied Science and Technology (ICAST 2021).(Publication Link)
Book Details: Handbook of Research on Artificial Intelligence and Knowledge Management in Asia's Digital Economy, Patricia Ordóñez de Pablos, Xi Zhang and Mohammad Nabil Almunawar (Eds.), Communications in Computer and Information Science.

2 2021 Vision based Efficient Collision Avoidance Model Using Distance Measurement.(Publication Link)
Book Details: Soft Computing Approach for Mathematical Modeling of Engineering Problems, Ahmadian, A., &Salahshour,S. (Eds.), Communications in Computer and Information Science.

3 2013 Real time vision based object detection from UAV aerial images: a conceptual framework.(Publication Link)
Book Details: Intelligent Robotics System: Inspiring the Next, FIRA 2013, K. Omar et al. (Eds.),Communications in Computer and Information Science.

4 2013 Adaptive motion pattern analysis for machine vision based moving detection from UAV aerial images.(Publication Link)
Book Details: Advances in Visual Informatics, IVIC 2013, H. Badioze Zaman et al. (Eds.), Lecture Notes inComputer Science 8237, pp. 104-114.

<mark>Conference Articles Published Only</mark>

1 2021 Edge Feature based Moving Object Detection Using Aerial Images: A Comparative Study. (Publication Link)
Conference Name: 6th International Conference on Computing Engineering and Design (ICCED).

2 2021 Detection of Cancer Cell and Tumor from MRI Image Using A Hybrid Approach – A ConceptualFramework. .(Publication Link)
Conference Name: The 5th International Multi-Conference Artificial Intelligence, 2021

3 2020 Stable Marriage Algorithm for Student-College Matching with Quota Constraints. (Publication Link)
Conference Name: In Proceedings of the International Conference on Computing Advancements (ICCA 2020).Association for Computing Machinery, New York, NY, USA, Article 52, 1–5.

4 2020 Toddler Sensory-Motor Development for Object Manipulation by Analyzing Hand-Pose. (Publication Link)
Conference Name: In Proceedings of the International Conference on Computing Advancements (ICCA 2020).Association for Computing Machinery, New York, NY, USA, Article 1, 1–7.

5 2020 A Robust Method for Lane Detection under Adverse Weather and Illumination Conditions Using ConvolutionalNeural Network. (Publication Link)
Conference Name: In Proceedings of the International Conference on Computing Advancements (ICCA 2020).Association for Computing Machinery, New York, NY, USA, Article 79, 1–8.

6	2020	Robust Underwater Object Detection with Autonomous Underwater Vehicle: A Comprehensive Study.(Publication Link)
		Conference Name: In Proceedings of the International Conference on Computing Advancements (ICCA 2020).Association for Computing Machinery, New York, NY, USA, Article 17, 1–10.
7	2019	A Comprehensive Review towards Appropriate Feature Selection for Moving Object Detection Using AerialImages. (Publication Link)
		Conference Name: IVIC 2019, LNCS 11870.
8	2015	Efficiency Measurement of Various Denoise Techniques for Moving Object Detection Using Aerial Images.(Publication Link)
		Conference Name: The 5th International Conference on Electrical Engineering and Informatics (ICEEI2015).
9	2014	Motion analysis for moving object detection from UAV aerial images: A review. (Publication Link)
		Conference Name: International Conference on Informatics, Electronics & Vision (ICIEV), 2014. pp. 1-6.