LIST OF PUBLICATIONS

- **Published**

J1. **Mehbub Alam**, Nurzaman Ahmed, Shyamal Ghosh, Rakesh Matam, and Ferdous Ahmed Barbhuiya, "*OptiFog:* A Framework for Acquiring State Information and Predicting Resource Availability for Task Offloading in Cooperative Fog-Networks", in ***IEEE Transactions on Services Computing***, Early Access, Pages 1-13, 2024.

J2. **Mehbub Alam**, Nurzaman Ahmed, Rakesh Matam, and Ferdous Ahmed Barbhuiya, "Analyzing the Suitability of IEEE 802.11ah for Next Generation Internet of Things: A Comparative Study", in ***Ad Hoc Networks, Elsevier***, Vol. 156, Pages 103437, 2024.

J3. **Mehbub Alam**, Nurzaman Ahmed, Rakesh Matam, Mithun Mukherjee, and Ferdous Ahmed Barbhuiya, "SDN-based Re-configurable Edge Network Architecture for Industrial Internet of Things", in ***IEEE Internet of Things Journal***, vol. 10, pages: 16494-16503, 2023.

J4. **Mehbub Alam**, Nurzaman Ahmed, Rakesh Matam, and Ferdous A Barbhuiya, "IEEE 802.11 ah-Enabled Internet of Drone Architecture", in ***IEEE Internet of Things Magazine***, Vol. 5, Pages 174-178, 2022.

C1. **Mehbub Alam**, Nurzaman Ahmed, Rakesh Matam, and Ferdous Ahmed Barbhuiya, "io-Fog: Prediction-based Fog Computing Architecture for Offline IoT", in *International Wireless Communications and Mobile Computing* **(IEEE IWCMC)**, Pages 1387-1392, 2021.

C2. **Mehbub Alam**, Nurzaman Ahmed, Rakesh Matam, and Ferdous Ahmed Barbhuiya, "L3Fog: Fog Node Selection and Task Offloading Framework for Mobile IoT", in *IEEE INFOCOM, IEEE Conference on Computer Communications Workshops* **(IEEE INFOCOM WORKSHOPS)**, Pages 1-6, 2022.

C3. Sangeeta Kakati, **Mehbub Alam**, Rakesh Matam, Ferdous Ahmed Barbhuiya, and Mithun Mukherjee, "Mobility-aware Task Offloading in Fog-Assisted Networks", in *IEEE Global Communications Conference* **(IEEE GLOBECOM)**, Pages 2897-2902, 2022.

C4. **Mehbub Alam**, Rakesh Matam, and Ferdous Ahmed Barbhuiya, "*OptFog*: Optimized Mobility-Aware Task Offloading and Migration Model for Fog Networks", in *IEEE International Conference on Advanced Networks and Telecommunications Systems* **(IEEE ANTS)**, Pages 539-544, 2023.

C5. **Mehbub Alam**, Nurzaman Ahmed, Rakesh Matam, and Ferdous Ahmed Barbhuiya, "*RedgeX*: Meta-learning based Optimal Analytical Model for Programmable Edge Intelligence", in *IEEE Wireless Communications and Networking Conference* **(IEEE WCNC)**, Pages 1-6, 2024.

C6. **Mehbub Alam**, Rakesh Matam and Ferdous Ahmed Barbhuiya, "*Edge-Mi:* Edge-based Microservices for Mobility-aware Task Migration Scheme", in *IEEE Future Networks World Forum* **(IEEE FNWF)**, 2024.

C7. Nasim Ahmed, Baharul Islam, **Mehbub Alam**, and Sudipta Majumder, "Leveraging LLMs and Deep Learning for Driver Drowsiness Image Categorization", **Accepted**, IEEE GCON, 2025

- **Communicated**

J1. **Mehbub Alam**, Mariam Alhashmi, Mohammad Atrouz and Abdulhadi Shoufan, "A Lightweight Authentication of Drone Remote Identification in Compliant with ASTM Standard", 2025.

J2. **Mehbub Alam**, Shyamal Ghosh, Ferdous Ahmed Barbhuiya and Rakesh Matam, "*VerEdge*: A Non-interactive Verifiable and Secure System for Edge Computing", 2024.

J3. Ruhul Amin Hazarika, Nurzaman Ahmed, Kumar Sekhar Roy, and **Mehbub Alam**, "A Deep Neural Network with Improved Adaptive Learning Rate Decay for Early Stage Alzheimer's Disease Classification", (**under review**), 2024

J4. Sk Mahmudul Hassan, Kumar Sekhar Roy, **Mehbub Alam**, Mithun Mukherjee, Ruhul Amin Hazarika, "Inception-enabled Vision Transformer (ViT)-based Model for Plant Disease Identification", 2024.

- **On Going**

J1. **Mehbub Alam**, Mithun Mukherjee, and Abdulhadi Shoufan, "*RID-Spotter:* Placement of Ground Observers for Continuous Detection of Drone's Remote Identification Messages".

J2. **Mehbub Alam**, Mohammad Owais, Baharul Islam, Nasim Ahmed, and Irfan Hussain, "Frontiers of Foundation Models: Bridging Domain Gaps with Large Language Models Through Practical Use Cases: A Comprehensive Review".

C1. Baharul Islam, Nasim Ahmed, **Mehbub Alam**, Ruhul Amin Hazarika, Sk Mahmudul Hassan "*AquaFusionNet*: A Robust Underwater Aquatic Defect Detection Using Feature Fusion and Attention-Based Deep Learning Model".