• 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 WORK-SHOPS**), 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".