S M Asiful Huda

✉ asifulhuda@gist.ac.kr   𝕏 @HUDASMAsiful1   in S M Asiful Huda
🌐 https://s-masif.github.io/
♠ SM Asiful Huda

Education

2021 – 2023   🔖 **M.Sc. Computer Engineering, Chosun University, South Korea**.
Thesis title: *Reinforcement learning-based offloading in unmanned aerial vehicle-aided edge computing systems*.
CGPA: 4.43/4.50

2015 – 2019   🔖 **B.Sc. Computer Science, East West University, Bangladesh**.
Thesis title: *An improved approach for detection of diabetic retinopathy using feature importance and machine learning algorithms*.
CGPA: 2.86/4.00

Selected Publications

Journal Articles

1. **Huda, S. M. A.** and S. Moh, "Deep reinforcement learning-based computation offloading in uav swarm-enabled edge computing for surveillance applications," *IEEE Access*, vol. 11, no. 1, pp. 68 269–68 285, 2023. 🔗 DOI: 10.1109/ACCESS.2023.3292938.

2. **Huda, S. M. A.** and S. Moh, "Survey on computation offloading in uav-enabled mobile edge computing," *Journal of Network and Computer Applications*, vol. 201, pp. 1–26, 2022. 🔗 DOI: 10.1016/j.jnca.2022.103341.

Conference Proceedings

1. **Huda, S. M. A.** and S. Moh, "Transfer learning algorithms in unmanned aerial vehicle networks: A comprehensive review," in *Proceedings of the 11th International Conference on Smart Media and Applications (SMA 2022)*, KISM and KISTI, Saipan, USA, Oct. 2022, pp. 9–14.

2. **Huda, S. M. A.**, E. M. Mahir, A. A. Tanvir, and S. Moh, "Evaluation of machine learning models for detecting network-based intrusions," in *Proceedings of the 10th International Conference on Smart Media and Applications (SMA 2021)*, KISM and ACM, Gunsan, Korea, Sep. 2021, pp. 27–31.

3. Abdullah-All-Tanvir, E. M. Mahir, **Huda, S. M. A.**, and S. Barua, "A hybrid approach for identifying authentic news using deep learning methods on popular twitter threads," in *Proceedings of the 2020 International Conference on Artificial Intelligence and Signal Processing (AISP)*, 2020, pp. 1–6. 🔗 DOI: 10.1109/AISP48273.2020.9073583.

4. **Huda, S. M. A.**, I. J. Ila, S. Sarder, M. Shamsujjoha, and M. N. Y. Ali, "An improved approach for detection of diabetic retinopathy using feature importance and machine learning algorithms," in *Proceedings of the 7th International Conference on Smart Computing & Communications (ICSCC)*, 2019, pp. 1–5. 🔗 DOI: 10.1109/ICSCC.2019.8843676.

Skills

Languages	🔖	Strong reading, writing and speaking competencies for English, Bengali.
Coding	🔖	C#, Python, C++, SQL, LaTeX, …
Databases	🔖	MSSQL, PostgreSQL.

Skills (continued)

Web Dev	⚑	Html, css, JavaScript, .NET, MVC, RESTful APIs
AI/Machine Learning	⚑	Data Analysis (Pandas, NumPy, Matplotlib), Python (TensorFlow, PyTorch, scikit-learn), Deep Learning (CNN, RNN, LSTM, Hybrid), Reinforcement Learning (Q-Learning, DQN, A3C), Time Series Modeling (ARIMA, LSTM, Prophet), Predictive Analytics, Generative Adversarial Networks (GANs), Model Interpretability (SHAP, LIME, Explainable AI)
Specialized Skills	⚑	Feature Engineering, Hyperparameter Tuning (GridSearch, NAS), Overfitting Analysis, Model Optimization, Cross-Validation, Regularization Techniques (L1, L2), Performance Metrics (ROC, AUC, Precision-Recall)
Misc.	⚑	Academic research, training, LaTeX typesetting and publishing.

Employment History

2024 – · · · ·   ⚑ **Research Associate, Gwangju Institute of Science and Technology (GIST), South Korea**.
Projects: *ML-Enhanced Coil Design for Wireless Power Transfer in Biomedical Implants*; *TEMPRES-SMP: Hybrid Prophet-LSTM-XGBoost Model for Price Forecasting*.
Skills: Python, TensorFlow, Keras, GANs, Time Series Forecasting, Machine Learning.

2023 – 2024   ⚑ **Researcher, HT Core Co., Ltd., Gwangju, South Korea**.
Project: *Development of XR-based multi-user training platform for clinical practice training*.
Skills: C#, Unity3D, Augmented Reality Glass, XR Development.

2020 – 2021   ⚑ **Software Engineer, Technology and Business Solutions Ltd., Dhaka, Bangladesh**.
Project: *Development of different components (Attendance, Leave, Payroll) in an HR Management Web Application*.
Skills: ASP.NET, C#, MVC, Web Development, HR Management Systems.

Miscellaneous Experience

Awards and Achievements

2021 – 2023   ⚑ **BK21 Fellow and Fully Funded Research Scholarship (KRW 21,068,000)**, *Brain Korea 21 (BK21) Program*, National Research Foundation of Korea, Ministry of Education, South Korea.

2021–2022   ⚑ **Top 15% Excellent Student Scholarship (KRW 4,950,000)**, Chosun University, Gwangju, South Korea.

2019   ⚑ **Travel Grant for ICSCC2019 (USD 750)**, East West University, Dhaka, Bangladesh.

Certification

2022   ⚑ **IELTS Overall 7.0**. Listening: 7.5, Reading: 6.5, Writing: 6.0, Speaking: 7.0

⚑ **Duolingo Overall 125**. Production: 125, Literacy: 130, Comprehension: 125, Conversation: 110.

References

Available on Request