

Sunzil Khandaker

✉ sunzilkhandaker@gmail.com ☎ +880 16 2699 2241 📍 Dhaka, Bangladesh

🐙 github.com/sunjilkh 🔗 [linkedin.com/in/sunzil-khandaker](https://www.linkedin.com/in/sunzil-khandaker) 📄 Google Scholar 🏆 Kaggle: [sunzilkhandaker](#)

CAREER OBJECTIVE

Computer Science & Engineering graduate with a strong record of peer-reviewed publications in **Elsevier**, **IEEE**, and **Springer Nature** venues. Experienced in scientific research, academic writing, technical documentation, and the preparation of well-structured, rigorously referenced reports. Seeking a professional opportunity to apply strong research, analytical, communication, and problem-solving skills while contributing to meaningful projects, continuous innovation, and organizational success.

EDUCATION

Daffodil International University (DIU) — *Graduated: Dec 31, 2025*

B.Sc. in Computer Science & Engineering

CGPA: 3.97 / 4.00

Focus: Artificial Intelligence, Computer Vision, Deep Learning

Major General Mahmudul Hasan Adarsha College

Science (Concentration in Higher Mathematics)

HSC

GPA: 5.00/5.00

Mirzapur Government S.K. Pilot High School

Science

SSC

GPA: 4.89/5.00

PEER-REVIEWED PUBLICATIONS

- **Khandaker, S.**, et al. “Transparent Deep Learning for Medicinal Plant Recognition: A Hybrid CNN–ViT Approach.” *Smart Agriculture Technology*, **Elsevier** (Q1, IF: 7.1, **Published**). [\[Link\]](#)
- **Khandaker, S.**, Rahman, M. “BDHerbalPlants: Augmented and Curated Herbal Plants Image Dataset.” *Data in Brief*, **Elsevier** (IF: 1.9, **Published**). [\[Link\]](#)
- **Khandaker, S.**, et al. “A Coverage-Preserving Ensemble Framework with Minority Recovery for Robust Indoor Localization.” *International Journal of Activity and Behavior Computing*, **IEEE** (**Published**). [\[Link\]](#)
- **Khandaker, S.** “Split-induced sibling data leakage inflates accuracy in medical image classification.” *npj Digital Medicine*, **Elsevier** (Q1, IF: 18, *Under Review*).
- **Khandaker, S.**, et al. “SolarLoRa: A Low-Cost IoT System for Soil Health Monitoring.” *IEEE ICCIT-2025* (**Published**). [\[Link\]](#)
- **Khandaker, S.**, et al. “BanglaRAG: Building a Multilingual Knowledge Backbone for LMS.” *IEEE QPAIN-2026* (**Published**). [\[Link\]](#)
- **Khandaker, S.** “Quant-XAI: Quantifying and Mitigating Explainability Drift Under INT8 Quantization in Edge-Deployed Visual Classification.” *Scientific Reports*, **Springer Nature** (Q1, IF: 4.6, *Under Review*). [\[Preprint\]](#)

RESEARCH & WRITING EXPERIENCE

Researcher | NanoBio Tech Center, DIU

Jan 2025 – Present

- Conducted end-to-end research—literature review, methodology design, results analysis, and full manuscript writing—for peer-reviewed Q1 journal submissions, authoring **multiple published papers** with major publishers (Elsevier, Springer Nature).
- Designed and executed XAI-based diagnostic evaluation frameworks (LIME, Grad-CAM, SHAP) to measure accuracy, detect hidden biases, and ensure interpretability of deep learning pipelines for biological imagery.
- Managed academic referencing, LaTeX typesetting, and the journal submission, revision, and peer-review response workflow, ensuring rigorous, well-structured, and authentically referenced scholarly writing.

Teaching Assistant — AI Engineering Bootcamp & AI Automation | Ostad

May 2026 – Present

- Developed structured technical learning content, assessments, and course documentation for a cohort of 1,000+ learners, translating complex research concepts into clear, well-organised written material.
- Provided detailed written feedback on learner submissions, strengthening clarity, structure, and correctness of technical writing.
- Contributed to curriculum design for AI engineering tracks, sequencing content and hands-on exercises aligned with competency benchmarks.

Jr. AI Developer | Joint Venture AI

Apr 2026 – Present

- Conducted project R&D and prepared client-facing technical documentation and reports, successfully serving 5+ clients.
- Built and optimised AI pipelines transforming raw multi-source data into high-quality datasets for generative AI and RAG architectures.

SELECTED TECHNICAL PROJECTS

- **BanglaRAG: End-to-End Agentic LMS Assistant** | [GitHub](#)
 - Designed and deployed an offline-first agentic application for university LMS environments leveraging modern orchestration frameworks (LangGraph/LangChain) for state management and multi-agent workflows.
 - Implemented custom chunking strategies and optimised embedding generation for reliable, low-latency retrieval.
 - **Stack:** Generative AI, Local LLMs, LangChain, LangGraph, Ollama, ChromaDB, Whisper.
- **AI-Powered Troubleshooting Service via RESTful APIs** | [GitHub](#)
 - Developed scalable AI services via RESTful APIs using **FastAPI**, integrating production-ready automated ticket escalation.
 - Built end-to-end AI/ML pipelines handling multi-source data ingestion (PDF, DOCX) and semantic search.
 - **Stack:** Google Gemini AI, Vector DBs (ChromaDB), PostgreSQL, FastAPI, SQLAlchemy.

RESEARCH & TECHNICAL SKILLS

Academic & Report Writing	Manuscript preparation, Literature & systematic review, Thesis/dissertation structuring, Technical report writing, LaTeX, Reference management (Zotero/Mendeley), Citation styles (IEEE/APA), Authentic & integrity-focused writing
Research Methodology	Experimental design, Data analysis & interpretation, Diagnostic evaluation, Reproducible research workflows
AI & Computer Vision	PyTorch, TensorFlow, YOLOv8, CNNs, ViT, Scikit-learn, Representation Learning
Explainability & Robustness	SHAP, LIME, Grad-CAM, Diagnostic Evaluation
Programming & Tools	Python (Advanced), OpenCV, Pandas, NumPy, SQL, Git, n8n (production)

AWARDS & RECOGNITION

- **Speaker Invitation** | World Conference on Plant Science | July 2026 (Rome, Italy).
- **Speaker Invitation** | Adv. ESCC 2026 Conference | September 2026 (London, UK).
- **National 1st Runner-up** | AgentX National AI Contest | NetCom Learning Bangladesh.
- **Champion** | Datathon Contest | Fall 2024.
- **1st Runner-up** | DIU Intra-University IoT Fest | 2023.
- **1st Runner-up** | Excel Pro — Pro Skills Battle | 2025.

CERTIFICATIONS

Neural Networks and Deep Learning — DeepLearning.AI / Coursera	[Verify]
Building AI Agents and Agentic Workflows — IBM / Coursera	[Verify]

REFERENCES

Dr. S. M. Aminul Haque Professor & Associate Head Department of Computer Science and Engineering Daffodil International University Email: aminul.cse@daffodilvarsity.edu.bd Mobile: +88 01847140129 Office: +8809617901233, Ext-15101	Mr. Md. Mizanur Rahman Lecturer (Senior Scale) Department of Computer Science and Engineering Daffodil International University Email: mizanurrahman.cse@diu.edu.bd Mobile: +88 01751726350
---	---