

## List of Approved Sub-Projects from Round 1

Sub-Project Title	Area	Principal Invigilator	Designation and Affiliation of PI
AI-Enabled Multi-Modal Fusion of Honey Features for Authenticity and Quality Assessment: From Laboratory Analysis to Industry Applications	A	Md. Abdulla Al Mamun	Professor, Department of CSE, Hajee Mohammad Danesh Science & Technology University
AI Enabled Building Code Compliant Structural Design Ensuring Safety Standard	A	Anindya Iqbal	Professor, Department of CSE, Bangladesh University of Engineering & Technology
RAG-Driven Business Intelligence Platform Integrating Enterprise Data for Real-Time Insight, Predictive, and Prescriptive Decision Analytics	A	Md Mosaddek Khan	Associate Professor, Department of CSE, University of Dhaka
Development and Effective Application of AI-Based, Post-Quantum Cryptography–Enabled Counterfeit Medicine Identification Tools for Better Treatment Outcomes in Bangladesh.	A	Arif Mahmud	Associate Professor, Department of CSE, Daffodil International University
SPADE-AI: Deep Learning–Based Soil Property Estimation from Smartphone Image through Spectral Reconstruction and Multi-Source Data Fusion for Crop Suitability Assessment and Rotation Planning	A	Md. Alam Hossain	Professor, Department of CSE, Jashore University of Science & Technology
AI-Powered Contradiction and Conflict Detection in Evolving Documents	A	Swakkhar Shatabda	Professor, Department of CSE, BRAC University
সবার খামার (ShobarKhamar): Building Bangladesh’s First AI-Driven Livestock Operating System	A	A. B. M. Alim Al Islam	Professor, Department of CSE, Bangladesh University of Engineering & Technology
BanglaEduAI: A Bengali-First Large Vision Language Model for Personalized Tutoring, Teacher Content Co-Creation, and Automated Script Marking	A	Rifat Shahriyar	Professor, Department of CSE, Bangladesh University of Engineering & Technology
Digital Transformation of Insurance Operations in Bangladesh through ERP: Enhancing Sustainability, Compliance, and Service Excellence	A	Sumon Ahmed	Associate Professor, Institute of Information Technology, University of Dhaka
Resource-Aware LLM-Guided Neural Architecture Search for Object Detection in TinyML Applications	B	Naushin Nower	Professor, Institute of Information Technology, University of Dhaka
Smart, Affordable, and Sustainable Agro-Tech Transformation in Bangladesh: Explainable AI and Deep Learning-based Hyperspectral Image Reconstruction with Consumer-Oriented Software Solutions for Agricultural Product Assessment	B	Md. Toukir Ahmed	Professor, Department of CSE, Pabna University of Science and Technology
BDFarmMate-AI: An AI-Driven Decision Support System from Crop Planting to Product Marketing for Smart Farming	B	Md Rakib Hassan	Professor, Department of Computer Science and Mathematics, Bangladesh Agricultural University

AI-Integrated Multiple Brain Diseases Detection and Diagnosis Platform for Sustainable National Health Care Services	B	Emdadul Haque	Professor, Department of Information and Communication Engineering (ICE), University of Rajshahi
AI, IOT and Data Science for Future Farming Systems	B	Chowdhury Mofizur Rahman	Professor, Department of CSE, BRAC University
Artificial Intelligence–Driven Movement Disorder Detection from Videos and Brain MRI images: A Pilot Study in Bangladesh	C	Md. Ekramul Hamid	Professor, Department of CSE, University of Rajshahi
Progya (প্রজ্ঞা): Developing a Unified AI-Powered National Competency Framework Integrating Psychometric Modeling, Domain-adapted LLM and Personalized Learning Pathways for 21st-Century Skills Assessment and Predictive Policy Analytics	C	Mohammad Saifur Rahman	Professor, Department of CSE, Bangladesh University of Engineering & Technology
Agri-VoiceLink: A Hybrid Conversational AI Platform to Enhance Agricultural Market Efficiency in Bangladesh	C	Nazrul Islam	Associate Professor, Department of Information and Communication Technology (ICT), Mawlana Bhashani Science & Technology University
Graph Machine Learning and Networks: Theory, Methods and Applications	C	Sadia Sharmin	Associate Professor, Department of CSE, Bangladesh University of Engineering & Technology
Affordable Myoelectric Prosthetic Hand Enabling Essential Daily Activities for Low-Income Amputees in Bangladesh	D	Ahammad Hossain	Associate Professor, Department of CSE, Varendra University
Developing a Gesture-based Intelligent Wheelchair for Assisting the Physically Challenged People in Bangladesh	D	Md Abul Kalam Azad	Professor, Department of CSE, Jahangirnagar University