

ASSISTANT PROFESSOR

Mr. Swarup Kumar Hazra Choudhury

Contact: hodaiml@bcetdgp.ac.in



RESEARCH INTERESTS:

OBJECT RECOGNITION, DEEP LEARNING, MACHINE LEARNING, ARTIFICIAL INTELLIGENCE, INFORMATION SECURITY & CRYPTOGRAPHY, INTERNET OF THINGS (IOT), DATA SCIENCE & DATA MINING, BLOCKCHAIN TECHNOLOGY, IMAGE PROCESSING, WEB DEVELOPMENT & CLOUD COMPUTING, SOFTWARE ENGINEERING

EXPERIENCE:

Academics: 19 Years

Industry: 1 Year

EDUCATION:

1. Pursuing PhD(CSE), NIT, DGP
2. M.Tech (Information Security), NIT, DGP
3. BE, UIT, The University of Burdwan

Courses Taught:

Pattern Recognition, Programming for Problem Solving using C programming, DBMS, OS, Data Structure, Information Security, Object Oriented Programming, Image Processing, Artificial Intelligence, Machine Learning, Cryptography, Deep Learning, Web Development, Cloud Computing, Software Engineering, C++ Programming, Java Programming & Python Programming, Internet Technology, Cyber Security, Computer Architecture, Computer Organization

Projects Handled:

1. Human Behavior Prediction (Domain -Pattern Recognition)
2. Neura-phrase: A Conversational AI (Domain: AI)
3. Cancer Detection System (Domain: Machine Learning)-2024
4. Domain AI: Legal Assistant for Real-Time Document Summarization-2023
5. Smart Negotiator: AI-based Bargaining Bot for E-Commerce
6. Cognitive AI Companion for Mental Wellness Monitoring
7. AI-Powered Career Counselor Using Semantic
8. 2022- Resume Analysis, Autonomous Curriculum Generator for Personalized

Learning

9. Machine Learning (ML)-Based Predictive Maintenance for Industrial IoT Devices
10. Credit Risk Classifier Using Ensemble Learning
11. ML-Powered Real-Time Stock Sentiment Tracker
12. Energy Consumption Optimizer for Smart Homes
13. ML-Driven Dynamic Pricing Model for Online Retail
14. Deep Learning (DL), DeepFake Detector using CNN and Spatio-Temporal Analysis
15. Multi-Language Handwriting Recognition using Deep RNNs
16. Neural Style Transfer for Artistic Image Generation
17. Deep Learning-based Tumor Detection from MRI Scans
18. Autonomous Drone Navigation using Deep Reinforcement Learning
19. Domain: Pattern Recognition (PR) Human Activity Recognition Using Wearable Sensor Data
20. Signature Verification System Using Siamese Networks
21. Facial Emotion Recognition with Real-Time Feedback
22. Gesture-Based Home Automation System Using PR Algorithms
23. Traffic Sign Pattern Detection for Smart Vehicles & many more

Research Publications:

1. S. K. H. Choudhury and D.Nandi, "An Adaptive Median-Weighted Filtering Technique for Speckle Noise Reduction in Ultrasound Images," IEEE Trans. Image Process., vol. 32, no. 4, pp. 2345–2356, Apr. 2011.

Additional Responsibilities:

HoD (AIML), NBA, Technical Grooming Committee, Project Committee

Awards Obtained:

1. WJCF at BCET since 2023
2. Best Faculty Award by Infosys at Bhubaneswar in 2015
3. WEBEL Certified JAVA Developer since 2006