

MD RASEL KHANDAKER

mdraselhandaker20@gmail.com | +60166694391 | Kuala Lumpur, Malaysia

RESEARCH INTERESTS

Machine Vision & AI for automated fabric colour inspection in smart textile manufacturing; comparative evaluation of Manual, IoT, and AI-driven quality monitoring systems; deep learning for defect detection and process optimisation in Industry 4.0 environments.

EDUCATION

MSc in Engineering in Business Management

2023 – 2026

Multimedia University, Malaysia | CGPA: 3.50

- Thesis: Adoption of IoT-Enabled Quality Monitoring System in a Smart Factory — Fabric Colour Variation
- Focus areas: Manual & IoT-based fabric colour inspection; data collection, analysis and system evaluation

BSc in Textile Engineering

2018 – 2021

Sonargaon University, Bangladesh

RESEARCH EXPERIENCE

MSc Research Project — Adoption of IoT-Enabled Quality

2025 – 2026

Monitoring System in a Smart Factory

- Designed an IoT-based quality monitoring system to detect fabric colour variation
- Developed and benchmarked manual inspection vs. IoT sensor-based methods; identified performance gaps
- Analysed colour accuracy metrics across production batches using quantitative data analysis
- Manuscript in preparation for submission to a peer-reviewed journal

PUBLICATIONS

- Khandaker, M. R. (in preparation). IoT-Based Quality Monitoring System in Smart Factories: A Case Study on Fabric Colour Variation. Target: peer-reviewed journal.

TECHNICAL SKILLS

AI & Machine Learning

Image processing, computer vision, deep learning fundamentals

Smart Factory & IoT

IoT-based monitoring systems, sensor integration, quality control

Data & Research

Quantitative data collection and analysis, experimental design, academic writing

Software

Microsoft Office Suite, HTML, CSS, JavaScript

REFERENCES

Available upon request (MSc Supervisor, Course Professors)