

NITER



Md. Mahraj Uddin

Industrial and Production Engineering

Bio

Md. Mahraj Uddin received his B.Sc. (Engg.) in Industrial and Production Engineering (IPE) from Shahjalal University of Science and Technology (SUST), Sylhet-3114 in 2018. Currently he is also pursuing his M.Sc. (Engg.) majoring IPE from Bangladesh University of Engineering and Technology (BUET), Dhaka-1205. During his undergraduate program he got department merit scholarship. His research interests lie in innovation management, supply chain management, operations management and human factors engineering. To optimize a supply chain and to achieve sustainable supply chain objectives, Md. Uddin's research attempts include the application of operational research tools and techniques as well as several multi-criteria decision-making approach to supply chain risk planning and decision making.

Education

Degree Name	Group/Major Subject	Board/Institute	Country	Passing Year
M.Sc. (Engg.)	Industrial and Production Engineering (IPE)	Bangladesh University of Engineering and Technology (BUET)	Dhaka-1205, Bangladesh	Ongoing
B.Sc. (Engg.)	Industrial and Production Engineering (IPE)	Shahjalal University of Science and Technology (SUST)	Sylhet-3114, Bangladesh	2018

Experience

Job Title	Organization	Location	From Date	To Date
Lecturer	NITER	Nayarhat, Savar, Dhaka	Dec 2, 2018	continue

Research Activities

Research Interest

Subject	Description	Research Interest (Goal/ Target Indication)
Supply Chain Management	supply chain risk mitigation and multi-decision criteria for achieving supply chain sustainability	
Operations Management	forecasting and inventory optimization through machine learning and deep learning	
Human Factors Engineering	sustainable and environmentally friendly workstation and product design, man-machine interaction recognition, ergo-economics	

Project/Research Supervision

Level of Study	Title	Supervisor	Name of Student(s)	Area of Research	Current Completion
Undergraduate Students	Optimization of Bin Packing and Vehicle Routing for Last Mile Delivery of Fast-Food Supply Chain	Yes	Tonmoy Paul, Mst. Fatema Tuj Jhora	Vehicle Routing Problem, Optimization of Bin packing System	Work-in progress
Undergraduate Students	Implementing an efficient cold supply chain visibility system with temperature risk mitigation for COVID-19 vaccine distribution	Yes	Imrul Hasan, Aqib Aman	Supply chain visibility, Integer programming	Work-in progress
Undergraduate Students	VRPTW in Milk Collection and Predicting Demand Using CNN and Random Forest	Yes	Ridoy Chandra Dhar, Md. Mehedi Hasan Niloy	VRP time window, demand uncertainty	Work-in progress

Publications

Journal Article

SL. No-	Article Name	Link
1.	Sakaline, G., Aman, M. A., Uddin, M. M. , et al (2022). Determining Optimal Production Plant Location and Vehicle Route in Upstream Supply Chain Network for Date Sap Processing Industry. <i>Journal of Applied Research on Industrial Engineering</i> 9(2), pp.180-196.	https://doi.org/10.22105/jarie.2021.278857.1280
2.	Uddin, M. M.* , Sakaline, G., Meem, S. N., Das, R. P., (2021). Assessing Implicit Causes of Fast Food Demand Fluctuation through Facilitating an Exploratory Factor Analysis. <i>American Journal of Applied Mathematics and Statistics</i> , 9(3), pp.83-89	http://pubs.sciepub.com/ajams/9/3/2/index.html
3.	Uddin, M.M.* , Sakaline, G. & Khan, M.M.A. (2021). Enhancing OEE as a Key Metric of TPM Approach-A Practical Analysis in Garments Industries. <i>European Journal of Engineering and Technology Research</i> . 6 (2), pp.142–147.	https://doi.org/10.24018/ejeng.2021.6.2.2376

Conference Proceedings

SL. No-	Paper Name	Link
1.	Islam, M. S.*, Uddin, M. M. & Hasan, M. R. “Measuring and Analyzing Job Stress and Fatigue among Workers and its Impact on Employee Productivity in a Pharmaceutical Factory: A Case Study”. 3 rd <i>International Conference on Mechanical, Industrial and Materials Engineering (ICMIME-2017)</i> . [Dec 28-30, 2017]	http://icmime-ruet.ac.bd/2017/DIR/Contents/Technical%20Papers/Industrial%20Engineering/IE-103.pdf
2.	Aman, M. A., *, Sakaline, G., Uddin, M. M. & Iqbal. M., “Identifying Employees’ Productivity Performance Factors and Evaluating their Interrelationship: An Exploratory Case Study in Bangladeshi Automobile Assembly Industry”. <i>4th International Conference on Industrial & Mechanical Engineering and Operations Management Dhaka, Bangladesh, (IMEOM-2021)</i> [Dec 26-28, 2021]	http://ieomsociety.org/proceedings/2021dhaka/383.pdf

3. `Debnath, A., Mahabub, S. A. & **Uddin, M. M.*** “Assessing Forecasting Techniques and Stock Replenishment Approaches for Optimal Inventory of Electronic Spare Parts”. *5th International Conference on Industrial & Mechanical Engineering and Operations Management Dhaka, Bangladesh, (IMEOM-2022)* [Dec 26-28, 2022] <https://ieomsociety.org/proceedings/2022dhaka/30.pdf>

Contact

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Institute – Faculty

Name of the Department: Industrial and Production Engineering

Position: Lecturer