JOYA RANI DAS

1509 N Bishop Avenue, Apt 3 **Phone: +15736471740**
Rolla, MO, 65401 **Email: jdpgd@mst.edu**

EDUCATION

Missouri University of Science and Technology
PhD Student in Material Science and Engineering
Rolla, MO USA AUGUST 2023 – ON GOING
Machine Learning, Optimization on cementitious materials

University Of Dhaka, Bangladesh
Master of Business Administration in Management Information System (2021)
Dissertation: **Strategic Analysis of Sonali Bank Limited**

Ahsanullah University of Science & Technology, Bangladesh
Bachelor of Science in Industrial & Production Engineering (2016)
Dissertation: **A Fuzzy Based Approach of Comparing Different Methods for Optimizing Bullwhip Effect in the Supply Chain Management**

WORK EXPERIENCE: Sonali Bank Limited, Bangladesh (2019-Present)

1. Handle all types of General Banking, meet the target deposit and prepare loan proposal
2. To ensure customer satisfaction and introduce and market our products to all types of customer according to their requirement
3. Suggest the customer our best products in accordance with their demand

INTERNSHIP EXPERIENCE:

Sanko Opticals Ltd, Bangladesh:

- Analyze their facility layout and suggested a feasible layout in order to reduce lead time and worker's idle time

- Observed their Quality Control technique and discuss some suitable sampling techniques with the management

Meiji Industries Ltd, Bangladesh

- Learned about strict Japanese rules of improving during time
- Learned about their excellent disciplinary inventory placement

INDUSTRIAL ATTACHMENTS:

- Aftab Automobiles Ltd:
- Karnaphuli Fertilizer Company Limited:
- Karnaphuli Paper Mills Limited:
- Usmania Glass Sheet Factory Limited:
- Di-Ammonium Phosphate Fertilizer Company

MBA EXPERIElNCE:

- Attended several business plan presentations
- Visited several multinational companies and learn about their distinctive strategy and competitive advantage

UNDERGRADE WORKS

- Attended several brain storming and business plan presentation
- Several workstation analysis of different professionals and identify their argonomical positions of their workstation
- Designed a Belt conveyor for our energy lab and got monetary reward from university
- Designed Egronomical Hammer and market the product to the affiliated professionals

RESEARCH INTEREST

- In my undergraduate thesis, the effect of forecasting technique, order processing cost and demand pattern on BWE and mean square error (MSE). The BWE and MSE have been evaluated using sales and order data. The results were analyzed using ANOVA and Fuzzy Logic, and finally the optimal parameters for minimum values of BWE and MSE have been determined.
- In my graduate thesis, It was an effort to reflect a clear idea about the external and internal strategic analysis, mission, vision and core values in developing a new business.
- In my peer reviewed journal, we propose a probability based six sigma approach to improve the process and create a better work environment for the garment industry using quantitative data.

PUBLICATIONS: Peer Reviewed Journals

1. Dey, P. R.; Mahamud, S.; Haque, Md. I.; Chowdhury, M. S. A.; Das, J. R. (2020) Six sigma DMAIC approach with uncertainty quantification and propagation in garments industry, Journal of Production Systems and Manufacturing Science, 2(1), pp. 70-83

HARDWARE SKILL

Optical microscope, Tool makers microscope, Ultrasonic tester, CNC Lathe Machine

SOFTWARE SKILL

MS office: Word, Excel, PowerPoint presentation, Microsoft Project
Programming: C++, Python, MATLAB
Statistics: Minitab
Design Software: AutoCAD, Solid works, Ansys