Bhawesh Sah

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Education

PhD, Industrial & Systems Engineering (GPA: 3.84/4) Aug 2015 – Aug 2019
State University of New York at Binghamton, Binghamton, New York

Fellow, Decision Sciences May 2014 – Jun 2015
Indian Institute of Management, Lucknow, India

M-Tech, Industrial Engineering & Management (GPA: 9.01/10) Aug 2012 – May 2014
Indian School of Mines, Dhanbad, India

B-Tech, Mechanical Engineering (Percentage: 64/100) Aug 2007 – May 2011
Uttarakhand Technical University, Dehradun, India

Professional Experience

Teaching Assistant Professor, Supply Chain and Information Management Group
D'Amore-McKim School of Business (Northeastern University) Aug 2019 – Present
Advisors: Prof. Yang Lee, Prof. Gilbert Nyaga

- Business Statistics with Python (Instructor rating of **4.4/5**)
- Fundamentals of Info Analytics (Instructor rating of **4.6/5**)
- Data mining for Business (Instructor rating of **4.9/5**)
- Data Mining and Machine Learning (Instructor rating of **4.7/5**)

Graduate Research Assistant, Computational and Operational Research (CORE) lab Jan 2018 – May 2019
Advisor: Prof. Sung Hoon Chung

- MILP formulation of the Multiple Truck and Drone Problem
- Development of heuristics for the Traveling Salesman Problem with Drone (TSPD)
- Robust optimization
- Machine learning
- Mathematical modeling and data analysis

Graduate Research Assistant, Watson Institute of Systems Excellence(Binghamton University) Jun 2017 – Jan 2018
Advisor: Prof. Sung Hoon Chung

- Reporting Key Performance Indicators (KPIs) weekly and daily
- Preparing daily and weekly metrics to report productivity
- Warehouse capacity planning based on forecasted production data
- Order batching and aisle balancing in the warehouse
- Improving the Kanban Replenishment Process

Graduate Research Assistant, Watson Institute of Systems Excellence(Binghamton University) Aug 2016– Apr 2017

Advisor: Prof. Nagen Nagarur

- Final inspection using 3D solder paste inspection machine
- NPI Engineer for a medical product. Prepared DMR, Training Matrix and LHR
- Worked to meet requirements of ISO 9001, ISO 13485
- Made quality reports (Daily and Weekly)

PhD Fellow, State University of New York at Binghamton May 2016 – Aug 2016

Advisors: Prof. Nagen Nagarur, Prof. Sung Hoon Chung

- Large scale optimization,
- Robust supply chain modelling

Teaching Assistant, State University of New York at Binghamton Sep 2015 – May 2016

Courses: Applied Probability and Statistics, Operations Management and Supply Chains

- Graded Homework, Quizzes, Mid-Term and End-Term
- Gave two guest lectures (Linear Programming, Bullwhip Effect)

Technical Certificates

Lean Six Sigma Green Belt, State University of New York at Binghamton Jan 2016

Computer Skills

- Statistical Analysis: Minitab, SPSS, SAS
- Simulation: Arena
- Programming: R, Julia, Python, SQL
- General Computer Knowledge: MS Office, Microsoft Excel, Visio

Selected Publications

- Titiyal, R., Thakkar, J. J., & Sah, B. (2022). Impact of e-fulfillment on consumer loyalty across different product types. Journal of Asia Business Studies, (ahead-of-print).
- Sah, B., Gupta, R., & Bani-Hani, D. (2021). Analysis of barriers to implement drone logistics. *International Journal of Logistics Research and Applications, 1-20.*
- Chung, S. H., Sah, B., & Lee, J. (2020). Optimization for Drone and Drone-truck Combined Operations: A Review of the State of the Art and Future Directions. *Computers & Operations Research, 105004.*
- Shetty, N., Sah, B., & Chung, S. H. (2020). Route optimization for warehouse order picking operations via vehicle routing and simulation. *SN Applied Sciences, 2(2), 311.*
- Raj, A., & Sah, B. (2019). Analyzing critical success factors for implementation of drones in the logistics sector using greyDEMATEL based approach. *Computers & Industrial Engineering, 138, 106118.*
- Sah, B., Titiyal, R., & Bhandari, D. D. (2019). Product assignment using quadratic assignment model in retail. *International Journal of Services and Operations Management, 32(1), 25-43.*
- Halawa, F., Sah, B., Srihari, K., & Chung, S. H (2018). A Milk-run Approach of Truck Scheduling Problem: Mathematical Formulation and Genetic Algorithm. *Proceedings of The Institute of Industrial Engineers Annual Conference, Orlando, FL, 19 – 22 May.*

- Li, Y., Sah, B., Halawa, F., & Chung, S. H (2018). Inventory Rebalancing for One-Way Electric Vehicle Sharing Systems. *Proceedings of The Institute of Industrial Engineers Annual Conference, Orlando, FL, 19 – 22 May.*
- Sah, B., Titiyal, R., & Sonia. (2017). A goal programming and simulation based study for overall process improvement in an Indian hospital. *International Journal of Services and Operations Management, 27(4), 439-456.*
- Sah, B., N. Dhende, P. Sawant, S. Salunke (2016). A Model for Supply Chain Optimization of An Engineering Product – An Indian Scenario. *Proceedings of The Institute of Industrial Engineers Annual Conference, Anaheim, CA, 21 – 24 May.*
- Sah, B., R. K. Mondal, and S. Mondal (2013). In Plant Logistics: A Case Study of The Turnaround Process of Trailers in a Steel Plant. *International Journal of Computing 3(4), 305-309.*

Working Papers

- Multiple Drone and Truck parcel delivery: Modeling and heuristics. *Targeting Computers & Operations Research*.
- A Bi-objective model for the Multiple Drone and Truck parcel delivery model. *Targeting Computers & Industrial Engineering.*
- Pseudo node insertion method for the Travel Salesman Problem with Drone. *Targeting Computers & Operations Research.*
- Social media text mining framework for drone logistics. *Targeting International Journal of Logistics Research and Applications.*

Working Book

- Data mining and machine learning for business. *Cognella Publishing.* Preliminary version to be published in Fall 2023.

Honors and Achievements

- Provost Fellowship, State University of New York at Binghamton Summer (2016 ,2017, 2018)