

GOHAR AZEEM, PHD

Assistant Professor of Teaching
Department of Industrial and Systems Engineering

Contact Information: 313 Bell Hall, North Campus
University at Buffalo, SUNY
Buffalo, NY 14260
Phone: (716) 645-2790
goharaze@buffalo.com |



Related Links (LinkedIn):
<https://www.linkedin.com/in/gohar-azeem-06586468/>

Research Topics: Supply Chain Optimization, Logistics and Last mile delivery, Operations Research, Project Management, Machine Learning.

Education: University of Texas at Arlington, Arlington, Texas
Jan 2020-May 2022: PhD in Industrial Engineering (Supply Chain)
Comsats Institute of Information Technology, Islamabad, Pakistan
Aug 2014-Dec 2016: Masters in Project Management
University of Engineering & Technology, Peshawar, Pakistan
Sep 08-Dec 2012: Bachelor of Science in Mechanical Engineering

Teaching (at UB): IE 326 - Planning Production & Service Enterprise
IE 500 – Special Topics (Project Management)

Publications:

- Jones, E.C., Azeem, G., Jones, E.C., Jefferson, F., Henry, M., Aboolmali, S., Sparks, J
“Understanding the Last Mile Transportation Concept Impacting Underserved Global Communities to Save Lives During COVID-19 Pandemic”, Front. Future Transp., 23 September 2021, No:- DOI: <https://doi.org/10.3389/ffutr.2021.732331>
- Gohar Azeem, Mirpouya Mirmozaffari, Reza Yazdani, Rao Aamir Khan. Exploring the impacts of COVID-19 pandemic on risks faced by infrastructure projects in Pakistan. International Journal of Applied Decision Sciences, 2021. fahal-03213837
- Jones, E.C., Azeem, G., Jefferson, F., “COVID-19 Supply Chain Optimized using A.I. for At-Risk Communities”, International Supply Chain Technology Journal (I.S.C.T.J.), Vol. 06, Issue 09, September 2020, DOI: <https://doi.org/10.20545/isctj.v06.i09.02>

- Jones, E.C., Anekonda, A., Azeem, G., “AI Based Remotely Monitoring Web User Interface to Capture Patient Temperature and Medicine Consumption”, International Supply Chain Technology Journal (I.S.C.T.J) Vol 7 Issue 12. DOI: <https://doi.org/10.20545/isctj.v07.i12.01>
- Jones, E.C., Azeem, G., Kale, T., Tiwari, O., Diwadkar, P., “Response of UHF RFID tag on conductive and non-conductive surfaces”, International Supply Chain Technology Journal (I.S.C.T.J), Vol 7, Issue 08, August 2021, DOI: <https://doi.org/10.20545/isctj.v07.i08.01>
- Azeem, G., “Recommendation of Possible Facilities Layout Tools for Classroom Purpose”, International Supply Chain Technology Journal (I.S.C.T.J), Vol 7, Issue 07, July 2021. DOI: <https://doi.org/10.20545/isctj.v07.i07.03>

Research:

My areas of Interests include Supply Chain Optimization, Operations Research, Data Analytics, Logistics and Last Mile delivery, Lean-Six Sigma and Project Management. My Ph.D. Dissertation "Leveraging Artificial Intelligence and Supply Chain Technologies with Telemedicine for Early Detection and Prevention of COVID-19 and Respiratory Infections in URM Communities" was funded by NSF in collaboration with Houston Health Department and Oschner Research Institute, Louisiana, focused on identifying the at-risk populations during pandemics and disastrous situations using Community Health Index, and then through our optimized supply chain models, lifesaving therapeutics and vaccines will be distributed to these at-risk populations with higher priority to save precious lives and tackle the spread of pandemic.

I have worked in the areas of Supply Chain and Logistics, Operations Management, Project Management and Data Analytics for last one decade. I have more than 5 years of diversified industry experience, working with fortune 500 companies like Shell, Coca-Cola and Schlumberger in different executive roles. While working in Industry, I worked on several revolutionary technologies such as Artificial Intelligence and machine learning, Big Data Analytics, Internet of Things, Digital Supply Chain Technologies, and other technological pillars of Industry 4.0, and I realized the potential these technologies have to revolutionize our world. This led me to pursue my research in these areas.

Experience:

January 2020-Current: **Graduate Research Assistant/Assistant Director**
RAID Labs, University of Texas at Arlington, Arlington, TX

- Managed the researchers and activities in research center as assistant-director.
- Worked on MIP Supply Chain Optimization including last mile delivery of therapeutics and performed data analytics and predictive modeling.
- Developed “AI Pill Consumption Confirmation” model and “Automated Sickness Detection” model using Machine Learning and Deep Learning.
- Used tools such as Python, Gurobi Solver, MATLAB, and Excel for MIP Supply chain optimization, Intelligent Routing including last mile transportation, Inventory optimization and data analytics and predictive modelling.
- <https://www.frontiersin.org/articles/10.3389/ffutr.2021.732331/abstract>
- https://www.nsf.gov/awardsearch/showAward?AWD_ID=2028612

August 2017-November 2019: Supply Chain Executive (Health, Safety Environment)

Coca-Cola Beverages Pakistan Ltd., Pakistan

- Developed a safety culture across entire business operation including Production, Sales, Logistic and Warehousing through various initiatives with 100% compliance to all requirements.
- Developed programs and conducted more than 10,000 hours of HSE training for employees to enhance safe working culture.
- Achieved 1.8 Million man-hours and zero LTI since start of operation.

December 2016-August 2017: Operations Executive

Royal Dutch Shell, Islamabad, Pakistan

- Ensured timely development of Capital Expenditure Plan 2018 and acquired approval on all investment proposals from Regional Leadership Team.
- Developed and controlled the budget plan for all Aviation sites.
- Analyzed the annual planned vs actual budget data for five different sites in 2017 and delivered cost saving initiatives to achieve 15% cost reduction vs plan.
- Successfully managed all services and maintenance contracts with regular performance reviews and continuous improvement.
- Aviation focal point for all Aviation procurements. Coordinated with all airfields to identify the annual requirements and ensured timely procurement by coordinating with CP team and vendors.
- Saved 500 Million PKR through optimized inventories and different procurement strategies.

October 2015-December 2016: Operations Manager

Royal Dutch Shell, Sukkur, Pakistan

- Independently managed complete Tank Farm & Into-Plane Refueling Operations for National Flag Carrier, International Airlines and Military Aircrafts with zero aircraft delay or incident in a challenging environment.
- Ensured 100% Timely Training, implementation of Safe System of Work & Green rating in A-Type Audit and timely closure of Non-Compliances.
- Managed staff performance, site budgeting and other matters.
- Achieved targets for Operational KPIs: Delivery data accuracy & on time deliveries and exceptional customer services.
- Successfully managed End to End Value Added 900 Km Supply Chain of Jet Fuel from Parco Refinery to Storage, Inventory Management, Stock Control and complete Quality Control and Assurance of the fuel from Storage Tank to the Aircraft Wing.
- Managed Operational Budget of site and optimized the Opex/Capex for cost-efficient operations to 10%.
- Successfully liaised with Internal Stake Holders, Supply Department, CP Department, Aviation Marketing, Transportation Department and External Stake Holders CAA, PIA, SAPS, CAA Fire & Safety Department, ASF, ATC for ensuring Smooth and Safe operation.

ACHIEVEMENTS

- Accredited as Trainer and trained all staff to ensure competence of staff with zero overdue trainings.
- Successfully completed Project of Implementation of Operation Manual in entire APME Region.

May 2013-October 2015: Aviation Operations Supervisor

Royal Dutch Shell, Islamabad, Pakistan

- As shift supervisor, ensured safe & efficient operations by independently supervising shifts with a team of 30 (ops & maintenance) & delivering sales of avg. 170 Million liters/annum and 100% safety record of zero accidents, zero injuries, zero spills.
- Maintained sufficient storage at airport by liaising through Supply team and analyzing the stock reports to identify any loss/gain beyond tolerance limits.
- Developed site maintenance planner for fixed/mobile facilities and supervised all preventive/breakdown maintenance activities.
- As accredited Permit Issuer, prepared and implemented several High and medium risk permits on multiple sites to ensure safe system of work.
- As HSSE Focal point, Successfully implemented HEMP, MOC, ERP and PTW systems at site and delivered HSSE plan with 100% targets achieved.
- Conducted First Aid Trainings, Emergency Response drills, monthly safety meetings, walkabouts and TBTs with staff on regular basis.
- Ensured that Health Risk and security Risk Assessments were timely reviewed & closure of actions.

ACHIEVEMENTS

- Successfully completed the Regional project for MESAF for Implementation of Safety Critical Equipment on Refuellers in 2015.
- Successfully completed requirements of licensing project for New Pakistan Oil Rules for Islamabad & Sukkur in 2015
- Organized the biggest Safety day event at site in 2015 to engage maximum stakeholders.