ASEEM MEHROTRA

Harvard Business School

Massachusetts Institute of Technology

University of Stirling, Scotland

Risk Management | Business Analysis | Supply Chain Management | AI/ML | Microsoft Certified Power BI Data Analyst Associate



Education & Certifications

September 2023 – September 2024

Master of Science in Data Science for Business | University of Stirling, Scotland (Full Time)

Best Scorer in **Business Consulting** and **Statistics** Modules among the cohort. Student Academic Representative for **Statistics with R** Module

September 2024

Certified Enterprise Risk Manager | CPD (UK) Certificate in ISO 31000:2018 (<u>Certificate Link</u>)

July 2024

Microsoft Certified: Power BI Data Analyst Associate (<u>Certification Link</u>)

April 2024

Alteryx Foundational Micro-Credential

March 2024

CSCMP Supply Chain Foundations: Transportation Professional Certificate (Certificate Link)

February 2024

Business Analytics Specialization | Coursera (University of Illions) (<u>Certificate Link</u>)

July 2023

Machine Learning Specialization | Coursera (Stanford University) (<u>Certificate Link</u>)

May 2023 – July 2023

Data Science and Machine Learning: Making Data-Driven Decisions, MIT Schwarzman College of Computing (<u>Certificate Link</u>)

Assimilated modern machine learning concepts, including supervised learning (linear regression, logistic regression, decision trees, random forest, XGBoost, neural networks) and unsupervised learning(clustering).

Overview

Highly **analytical** and **results-oriented** professional with 16+ years of experience in leveraging data science, risk management, and business analysis to drive strategic **decision-making** and **optimize processes**. Proven ability to **identify and mitigate risks**, **analyze complex datasets**, and develop actionable insights through **advanced data visualization** and **machine learning** techniques. Proficient in **Python**, **SQL**, **and Power BI**, with a strong focus on delivering impactful solutions that enhance **efficiency**, **productivity**, **and profitability**.

Profile Summary

- Data-informed Risk Management Specialist with 16+ years in Oil & Gas, adept at identifying, examining, and mitigating risks to enhance operational efficiency and safety.
- Impact-focused Business Analyst fueled by data to achieve strategic decision-making and process optimization.
- Proficient in Python, SQL, Power BI, and Azure MLOps, dedicated to driving continuous improvement and innovation through AI and machine learning solutions.
- Proven ability to communicate complex concepts effectively with internal and external clients to understand requirements and manage expectations.
- Dedicated to fostering continuous improvement and innovation through AI and machine learning to contribute to a more sustainable and inclusive world.
- Demonstrated a commitment to continuous learning and professional development through various certifications and courses, enhancing adaptability to new challenges.
- Consistently delivered high-quality services to meet client needs, achieving continued high satisfaction from operational users.
- Distinguished track record of successfully leading cross-functional teams and projects, fostering collaboration and delivering results.

Work Experience

Apr'15 – Aug'23 | ADNOC Gas, Abu Dhabi | Instrumentation and Control Engineer

- Mitigated risks in brownfield projects, boosting system reliability by up to 20%.
- Analyzed **process data** to identify patterns, minimizing equipment downtime by **20%**.
- Conducted **root cause analyses** to prevent recurring issues, improving system availability to 99%.
- Collaborated on 10+ engineering change projects, saving USD 1 million.
- Optimized the weekly work planning process, increasing human resource utilization by 15% and decreasing non-compliance tasks by 80%.
- Built KPI dashboards using Excel and Power BI, resulting in a 12% improvement in HSE compliance.
- Coordinated daily operations and project assignments for a team of 15, increasing task completion rate by 10%.
- Crafted training material for new joiners, elevating training effectiveness by 60%.
- Prepared and implemented standard maintenance procedures to ensure performance and safety compliance.
- Delivered project and performance presentations to stakeholders, securing project approvals.

Nov'06 – Apr'15 | Reliance Industries Ltd, Surat | Senior Instrumentation Reliability Engineer

- Enhanced maintenance planning & execution process to increase the resources utilization by 15%.
- Monitored shutdown activities to assure timely and safe start-up after turnaround.
- Collaborated as a team member on Emergency Shutdown System (ESD System) upgrade projects in the polyethylene plant, enhancing safety, reliability, and plant availability by 50%.
- Awarded "Significantly Exceeded Expectations" for three successive years (2009-2012).
- Awarded best trainee during the first year of employment.

March 2022 – May 2023

Micro Master's in Supply Chain Management with CTL.CFx Certification, Massachusetts Institute of Technology Center for Transportation and Logistics Grade: 90% (<u>Certificate Link</u>)

January 2022 – April 2022

Credential of Readiness (CORe), Harvard Business School Online

Grade: Passed with High Honors

CORe (Credential of Readiness) is a certificate program on business fundamentals. It comprises three courses—Business Analytics, Economics for Managers, and Financial Accounting.

February 2018

NEBOSH International General Certificate in Occupational Health & Safety

Technical Skills

Data Science & Analytics: Data Modeling, Data Visualization, ETL/EDA, Time Series Forecasting, Statistical Analysis, Machine Learning (Linear/Logistic Regression, Decision Trees, Random Forest, XGBoost, Neural Networks, Clustering), Deep Learning, Natural Language Processing

Risk Management: Risk Identification & Assessment, Root Cause Analysis, Risk Mitigation Strategies, HAZOP, Safety Integrity Studies

Business Analysis: Requirements Gathering, Process Optimization, KPI Development, Performance Management, Stakeholder Communication, Presentation Skills

Software: Python, SQL, Azure MLOps, Power BI, Tableau, Excel (Pivot Tables & Charts)

Soft Skills: Leadership, Communication, Teamwork, Problem-Solving, Adaptability, Continuous Learning

Personal Details

DOB: 15th December 1984 Languages: English & Hindi

Key Projects

Digital Transformation and Automation Project at Wholesale Brand Management Ltd., Alloa, Scotland (Internship cum Live Project: MSc Data Science for Business)

- Spearheaded the organization's data reporting process, automating data integration with Power BI to develop a performance management system that enhanced decision-making efficiency by 50%.
- Optimized Power BI dashboards for monitoring marketing, operational, sales, and financial performance, leading to a 10-12% enhancement in employee work efficiency.
- Formulated a digital marketing effectiveness and financial performance tracking system in Power BI.
- Digitized leads conversion data through advanced Power BI visualizations, increasing the leads conversion rate by 8-10%.
- Integrated text analytics in Power BI to minimize pending issues by 50%.

Hazard and Risk Analysis Study in Sulfur Recovery Plant at ADNOC Gas

- Assessed potential hazards and operational risks in a Sulfur Recovery Plant through a HAZOP and safety integrity study.
- Identified and mitigated over 30 potential hazards, curtailing safety incidents.
- Developed and implemented risk mitigation strategies to safeguard **100% safety compliance**.

Reliability improvement of Furnace Temperature Monitoring System at ADNOC Gas

- Led a cross-functional team to upgrade the furnace temperature monitoring system, reducing downtime by 25% and improving furnace reliability by 10%.
- Standardized inventory for four furnaces, saving USD 150,000.
- Presented project outcomes to stakeholders, securing their buy-in.

Emergency Shutdown System (ESD) Upgrade Project at Reliance Industries Ltd.

- Led a team of engineers and supervisors to execute a planned turnaround in the Polyethylene plant.
- Upgraded the relay-based hardwired ESD system to a Triconex PLC with SIL3 compliant system architecture.
- Completed the project on time, adhering to all safety compliances with zero safety incidents, and augmenting system reliability by at least 50%.

Academic Projects

Fake News Classification using Gensim Word2Vec

Applied Gensim Word2Vec and ensemble learning models to achieve 78% recall and 79% specificity in classifying fake news articles.

Text Analytics and Sentiment Analysis

- Explored sentiments in social media posts, identified frequent words/bigrams, and analyzed sentiments using Vader Sentiment Analyzer.
- Achieved 81% recall and 82% F1-score on sentiment classification.

Product Classification based on Product Description using LLM (Generative AI/ GenAI)

Employed **LLM prompt engineering** for product classification, attaining 92.5% accuracy with **few-shot prompting**.

Rise of Bitcoins Tableau Visualisation

Created a Tableau visualization interpreting Bitcoin trends, featured as "Viz of the Day".

Customer Satisfaction Rating Prediction (Hackathon: Shinkansen Travel Experience; Great Learning):

- Developed a sequential ANN model to predict customer satisfaction, attaining 95.22% accuracy.
- Ranked top six in the hackathon.

Predicting Potential Customers (Academic: MIT IDSS)

Deployed machine learning algorithms to predict lead conversion, reaching 87% True Positive Rate and 77% F1-score.