

G M Iqbal Mahmud

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San Marcos, Texas, USA

Sumamry of Qualification

- MS Industrial Engineering student (4.0 GPA) with 2+ years of supply chain planning experience at Unilever; expertise in optimization (Python, Gurobi, AMPL), SAP, and supply & distribution planning (MPS, MRP, DRP).
- Delivered measurable operational impact: automated planning processes achieving 78% reporting time reduction, maintained 98% dispatch rate, and supported 158% demand surge through cross-functional coordination and data-driven decision-making.
- Published researcher in supply chain, AI and sustainability with active graduate research in resilient network design; selected for competitive ULIP program; awarded Graduate Merit Fellowship and consistently recognized for academic excellence (Dean's List, 4-year technical scholarship).

Education

Master of Science in Industrial Engineering

Texas State University (TXST), San Marcos, Texas

Aug 2025 – May 2027

CGPA: **4.00/4.00**

- Started research with Dr. Wenquan Dong- focusing on the Resilient Data Center Network Design.
- Graduate Instructional Assistant: Facilitating Supply Chain, Operations Research, and Facility Planning courses.
- **Key Coursework:** Applied Operations Research, Advanced Optimization, Nonlinear Optimization, Modeling and Analysis of Manufacturing Systems, Advanced Quality Control.
- **Student Member:** INFORMS.

Bachelor of Science of Industrial & Production Engineering

Khulna University of Engineering & Technology (KUET), Bangladesh

Feb 2017 – Apr 2022

CGPA: **3.65/4.00** (3.78 last 4 semesters)

- Key coursework: Operations Research, Logistics & Supply Chain, Operations Management, MIS Analysis & Design, Quality Management, Production Systems, CAD and CAM.

Skills

Optimization & Analytics: Python (pandas, numpy), Gurobi, AMPL, Arena, R, SQL, VBA

BI & Automation: Power BI, Tableau, Advanced Excel (PivotTables, Power Pivot), Power Automate

ERP & Planning Systems: SAP (PP/MM) (BOM, MRP, production versions), Kinaxis RapidResponse

Planning S&OP, Master Production Scheduling (MPS), Material Requirements Planning (MRP), Distribution Requirements Planning (DRP), Forecasting

Tools & Design: GitHub, $\LaTeX$, ArcGIS, SolidWorks, AutoCAD, Draw.io

Professional Experience

Supply Chain Planning Officer — Nutrition

Unilever Consumer Care Limited, Dhaka, Bangladesh

Jun 2023 – Aug 2024

- Led daily **MPS** across 3 plants; aligned plans with capacity (OEE) and inventory strategy to drive executable schedules and faster decisions.
- Built Python, Power Automate, and SAP-scripting automations; cut reporting time **90 → 20 min (–78%, ~4.5× faster)**, saving **~5.8 hr/week** at 5 runs/week.
- Developed automated checks for **MRP** (RM requirements vs. orders/shipments) and instant plan-vs-coverage views, improving DOH control and exception responsiveness.
- Drove **DRP** by monitoring **DR**, **OTIF**, and FG/RM inventory to sustain service while containing stock.
- Avoided raw and packaging material write-offs by defining FG/RM/PM stock norms, rigorously managing expiries, and coordinating extensions/consumptions with **R&D** and **Quality**.
- Rebuilt master data and multi-level **BOMs** for **45+ SKUs**; enabled **alternate BOM** via Production Versions to increase resilience during demand and supply shifts.
- Maintained **Dispatch Rate** at **98% (92.3% → 98.2%)** by creating the cross-depot “**Nutrition O2B Support**” system and tightening planner/DRP coordination.
- Supported a **158%** demand upsurge for Knorr over 3 consecutive months by securing uninterrupted RM/PM flow with procurement, DRP, and regional suppliers.
- Launched/relaunched **4 SKUs** (incl. BSTI compliance) with full stakeholder alignment and **OTIF** delivery.
- Authored SAP **VBA** utilities (FG PO creation, TECO) and automated breakdown of FG plans into day-wise **RM/PM** requirements with coverage computation.

Unilever Leadership Internship Program (ULIP) — Supply Chain

Sep 2022 – Dec 2022

Unilever Bangladesh Limited, Dhaka, Bangladesh

- Selected via a 4-stage process from **4,500+** applicants nationwide.
- Built a VBA planning tool (“NTPP”) to streamline production planning and; reduced manual steps and errors.
- Restructured Forecast Accuracy/Bias files with automation; improved reporting speed and decision quality.

Supply Chain Intern

Jun 2022 – Sep 2022

Bengal Group of Industries, Dhaka, Bangladesh

- Developed and implemented an **Excel-based MRP dashboard** for **4** business units to streamline factory material flow and standardize coverage/shortage reviews.
- Optimized the Comparative Statement (CS) process by restructuring and indexing **1,400+** files; created an interactive **Power BI** dashboard to search/filter suppliers, prices, and lead times, accelerating sourcing decisions.

Selected Projects

- **Airplane Boarding Optimization (Nonlinear Optimization), 2025** — Implemented a mathematical model to optimize aircraft boarding sequences; utilized **Gurobi**, **AMPL** and **Python** to minimize turn-around time.
- **Amazon Logistics Analytics (Predictive Modeling), 2025** — Performed statistical analysis and predictive regression modeling on Amazon Delivery Data using **Python**; identified and quantified key logistics latency drivers to improve delivery lead-time visibility.
- **Vehicle Routing Optimization (Thesis), 2022** — Solved a CVRP case using heuristics (Nearest Neighbor, Sweep, Clarke–Wright) and **OR-Tools**; compared runtime vs. solution quality and recommended a deployable policy.
- **Automated MPS/Execution Analytics (Unilever), 2023–2024** — Automated KPI pipelines (coverage, capacity adherence, plan vs. actual) via Python/SAP/VBA; reduced cycle time and manual errors.
- **Foldable Stair — Product Design Lab (SolidWorks & Prototype), 2021** — End-to-end: customer need → concept selection → build; delivered a working physical prototype and a concise design brief. [GrabCAD](#)
- **Full Tractor — SolidWorks Project, 2021** — Completed a full 3D model. [GrabCAD](#)

Publications

1. Bhowmik, O., Chowdhury, S., Ashik, J. H., **Mahmud, G. M. I.**, et al. (2024). *Application of AI in reverse logistics: A bibliometric and network analysis*. **Supply Chain Analytics**, 7, 100076.
2. Tabbakh, A., Al Amin, L., Islam, M., **Mahmud, G. M. I.**, et al. (2024). *Towards Sustainable AI: A Framework for Green AI*. **Discover Sustainability**, 5, 408.
3. Amin, L. A., **Mahmud, G. M. I.**, et al. (2025). *AI/ML in Combating COVID-19: Lessons for South Asia*. (Under review).

Certifications

Optimization 301 for Data Scientists — Gurobi Optimization	Dec 2025
Product Management Bootcamp — HDNB	May 2025
R for Data Science: Analysis and Visualization — LinkedIn Learning	Dec 2024
Modern Practices of Supply Chain & Logistics — BDJobs	Jun 2021
Excel Skills for Business Specialization — Coursera	Aug 2020
Operations Management: Organization and Analysis — Univ. of Illinois (Coursera)	May 2020

Honors & Awards

- Awarded the Graduate Merit Fellowship at Texas State University
- Dean’s List — [KUET Faculty of Mechanical Engineering](#), Mar 2019
- 1st Runner-up — SolidWorks Workshop ’18, [IEM Robotics & CAD Club](#), Oct 2018
- Technical Scholarship — [KUET](#), 4 academic years
- [ISCEA PTAK Prize Case Competition](#) — 60% Scholarship, Jul 2021
- Top 10 Finalist — ‘SCA Upstream’ Case Competition, [Supply Chain Alliance, Univ. of Dhaka](#), Oct 2020

Volunteer & Co-Curricular

- [Level 7 Local Guide — Google Maps](#) (Oct 2019 – Present): 1,711 contributions; **2.2 Million views**.
- [Senior Executive & Instructor — IEM Robotics & CAD Club, KUET](#) (Aug 2019 – Feb 2022): Mentored juniors in AutoCAD/SolidWorks; ran robotics/programming workshops.
- [Freelancer \(Level 1\) — Fiverr](#) (Oct 2020 – Jul 2023): 20+ projects in Excel automation, forecasting, and MRP (5★ ratings).