314-555-55555 LinkedIn: linkedin.com/in/___ GitHub: github.com/___ St. Louis, MO

Skills

- SQL(SQL server, MySQL, PostgreSQL)
- Python (Pandas, Numpy, SciPy, Matplotlib, Tensorflow, SKlearn)
- Tableau

- Microsoft Power BI
- Minitab (Test of hypothesis, ANOVA, DOE)
- Excvel (Vlookup, Conditional Formating, Pivot Tables)

Recent Data Analytics Projects

Hydroponic Farm Optimization-Personal Project- Amman Jordan

Feb, 2025

- Developed a linear programming model to optimize resource allocation (nutrients, water, light) for a hydroponic farm,
- Tools: Python (PuLP), Excel, Power BI.
- Impact: Improved production efficiency and informed scalability plans. Maximizing crop yield by 43% and reducing resource waste by 29%.

Blended Teaching Survey Analysis -HTU- Amman Jordan

April, 2025

- Analyzed blended learning survey data from 500+ students to evaluate teaching effectiveness and engagement.
- Tools: Microsoft Forms, Minitab, Power BI.
- Impact: Increased course satisfaction rates with data-informed recommendations.

Bank Loan Portfolio Dashboard -JIB- Amman Jordan

March, 2024

- Built an interactive dashboard to visualize the bank's loan portfolio, integrating SOL-based data.
- Tools: SQL, Excel.
- Impact: Enabled real-time monitoring and improved risk management.

Institutional Review Board (IRB) Review Times -AlSalt Hospital- Al June, 2023 Salt, Jordan

- Implemented statistical process control and root cause analysis to identify bottlenecks in the IRB review process using Control charts, process mapping, cause-and-effect analysis.
- Tools: Microsoft Forms, Minitab.
- Impact: Reduced review times by 39% enabling faster research approvals.

Streamlined Pediatric Radiology Scheduling -AlSalt Hospital- Al Salt, August, 2023 Iordan

- Unified five separate scheduling systems into one consolidated platform for pediatric radiology using Scheduling optimization, workflow analysis, stakeholder collaboration.
- Tools: Python (PuLP), Arena, Excel, Minitab
- Impact: Improved appointment processing speed by 11%, shortened patient wait times by 9%, and significantly reduced incoming caregiver phone inquiries by 22%.

Optimized Radiology Department Workflows -AlBashir Hospital- Al Oct, 2023 Amman, Jordan

- Action: Applied value stream mapping and facility layout redesign across CT, MRI, Nuclear Medicine, Ultrasound, and Vascular Interventional units using: Lean healthcare principles, value stream mapping, process redesign.
- Tools: Microsoft Forms, Minitab.
- Impact: Enhanced patient flow, minimized bottlenecks, and increased service efficiency across multiple modalities.

Work Experience

Al Hussein Technical University – Acting Chair & Associate Professor, Industrial Engineering, Amman, Jordan

- Lead Industrial Engineering department, integrating analytics and machine learning into curriculum.
- Applied data-driven decision-making in accreditation and program development.
- Mentored research projects on predictive modeling and optimization.

Youngstown State University – Associate Professor, Industrial & Systems Engineering, Youngstown, OH

- Taught courses in data analysis, statistics, and operations research.
- Conducted research on predictive models for surgical scheduling.
- Supervised student projects applying machine learning to industrial problems.

German Jordanian University - Associate Professor, Sep 2017 - Aug 2021 **Industrial Engineering**, Amman, Jordan

- Applied machine learning and optimization to manufacturing and healthcare.
- Developed MSc Engineering Management program focusing on data-driven decision making.
- Supervised graduate theses on predictive analytics and supply chain optimization.

Applied Science Private University – Assistant Professor, Sep 2011 – Aug 2017 **Industrial Engineering**, Amman, Jordan

- Taught courses in quality engineering, statistics, and operations management.
- Conducted research on predictive analytics and optimization.

• Received Outstanding Research Award (2015).

Healthcare Operations & Performance Excellence (HOPE) - May 2009 – Aug 2013 **Data Analyst / Consultant,** Ypsilanti, MI

- Analyzed hospital performance data and identified inefficiencies.
- Implemented statistical process control and Six Sigma methods.
- Optimized scheduling and workflows across hospital units.

Tasty Sub & Beef – Supply Chain Manager, Chicago, IL Dec 2009 - April 2009

- Managed supply chain operations for multi-unit restaurant business.
- Improved inventory management with Excel-based tracking.
- Achieved 97% on-time delivery and reduced costs with JIT strategies.

Certifications

- Certified Analytics Professional (CAP) INFORMS
- Power BI Data Analyst Associate (PL-300) Microsoft
- Certified Supply Chain Professional (CSCP) APICS
- Project Management Professional (PMP) PMI

Education

- Ph.D. in Systems Engineering Ohio University, 2011
- M.S. in Management Information Systems Keller Graduate School of Management (DeVry University), 2004
- B.S. in Computer Information Systems DeVry University, 2002
- B.S. in Industrial Engineering University of Jordan, 1998

Recent Publications

Authored 30+ peer-reviewed publications on machine learning, optimization, and operations management. Recent publications:

- Ramadan, S.Z. et al. (2025). Optimizing 3D Printing Parameters for Lightweight UAV Components. Materials Science in Additive Manufacturing.
- Ramadan, S.Z. et al. (2025). A Data-Driven Approach for Predicting Remaining Intra-Surgical Time and Enhancing Operating Room Efficiency. JIEM, 18, 145-166.

- Ramadan, S.Z. et al. (2024). Optimizing tensile strength and energy consumption for FDM through Mixed-Integer Nonlinear Multi-Objective Optimization and Design of Experiments. Heliyon, 10(9).
- Ramadan, S.Z. et al. (2023). An Accurate and Robust Genetic Algorithm to Minimize the Total Tardiness in Parallel Machine Scheduling Problems. Management & Production Eng. Review, 14(4).