

Mona Khalil

Analytics Engineering & Data Science Leader



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Profile

Analytics & data science leader with a track record of developing and managing high-performing teams. Experienced in leading strategic initiatives in data science, product analytics, machine learning, and enterprise data warehousing. Published author, public speaker, and educator.

Experience

SENIOR MANAGER, ANALYTICS ENGINEERING | JUSTWORKS

JULY 2024 - PRESENT

- Led enterprise data warehouse overhaul, eliminating 98% of redundancies & known data quality issues
- Rolled out data catalog (Atlan) with a comprehensive business glossary and dataset documentation
- Coordinated impact analysis steps with Engineering, increasing lead times for database changes by 3+ days
- Facilitating & encouraging AI innovation within the team, leading to 30%+ increases in productivity
- Leading education efforts to improve the productivity and self-service analysis capacity of the company
- Expanded the team from 4 to 6 developers and 1 subject matter expert in data governance

SENIOR MANAGER, DATA SCIENCE | GREENHOUSE SOFTWARE

SEPT 2021 - JUN 2024

- Led machine learning/ML modeling strategy for classifying high-value text data with 85-95% accuracy
- Negotiated partnership agreements using outputs from the ML strategy, generating \$1 million in revenue
- Increased the productivity of key teams by over 30% using generative AI
- Hired 5 data scientists to grow and split the team into product and machine-learning specializations

SENIOR DATA SCIENTIST | GREENHOUSE SOFTWARE

JULY 2019 - SEPT 2021

- Decreased time to complete core workflows by developing and tracking department north star metrics
- Established a culture of experimentation by leading the first A/B testing program in R&D
- Increased the accuracy of churn forecasting by 10% by training and deploying a churn prediction algorithm

DATA SCIENCE PRODUCT MANAGER | DATACAMP

SEPT 2018 - MAY 2019

- Launched a diverse portfolio of over 15 SQL, analytics engineering, and mathematics courses and skill tracks
- Enhanced SEO results by A/B testing course names and descriptions increasing course landings by 10%
- Enabled efficient targeting of course quality improvements by creating metrics on chapter drop-off rates

RESEARCH SCIENTIST | NEW YORK CITY HOUSING AUTHORITY

JUL 2017 - AUG 2018

- Developed algorithm to predict waitlist times for public housing applicants
- Predicted daily resident heating complaints, saving on fuel and labor costs
- Developed algorithm and a geospatial tool to identify and remove hot spots of vermin in public housing

Teaching & Consulting

INSTRUCTOR & DATA SCIENCE SUBJECT MATTER EXPERT | EMERITUS INSTITUTE OF MANAGEMENT

2019- 2023

- Instructor for course, *Data Science for Business Decision-Making*
- Curriculum designer for multiple courses on analytics, machine learning, and deep learning

AI-PLUS | OPEN DATA SCIENCE CONFERENCE

2020-2022

- Instructor for courses, *SQL Bootcamp for Data Science* and *Complete Python Fundamentals*

Talks & Publications

EFFECTIVE DATA ANALYSIS (BOOK)

2025

- Published author with Manning Publications

OPEN DATA SCIENCE CONFERENCE

2020-2024

- Delivered multiple talks and tutorials, including *Intro to SQL*, *Model Evaluation Strategies*, and *Maximizing Value from your Deliverables*

NYC SCHOOL OF DATA

2022

- Delivered talk titled *Responsible Use of Demographic Information*

Skills

Leadership & management: Strategic planning & roadmapping, cross-functional team leadership, talent development, hiring & scaling teams, budget management & resource allocation, executive communication

Data strategy: Data architecture & governance, infrastructure, self-service enablement, data product development, data operations, analytics & BI platform management

Technical expertise: Advanced data modeling, data warehouse architecture, Snowflake, Redshift, orchestration (Airflow, Argo), data observability & reliability

Data science & analytics: statistical modeling & hypothesis testing, experimentation frameworks & A/B testing, predictive analytics & forecasting, machine learning lifecycle management

Compliance & governance: GDPR, CCPA, sensitive data management, minimum access policies, data quality & stewardship, data contract management

Tools & technology:

Modern data stack: dbt, Airflow, Argo, Snowflake, Redshift, Fivetran

Languages: Python, R, SQL

BI/analysis tools: Tableau, Mode, Looker, Hex, Sigma, Apache Superset

Data catalogs: Atlan, Alation, Amundsen

Education

Baruch College, CUNY – M.S. Statistics (in progress)

Fordham University – M.A. Applied Developmental Psychology, 2016