

# HEBATALLA ELGAMAL

Data Analyst | Business Intelligence | Supply Chain Analytics

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## PROFESSIONAL SUMMARY

Results-driven Data Analyst with 6+ years delivering data-driven insights and automated solutions driving business growth. Expertise in SQL, Python, Power BI, SAP Analytics, and advanced Excel (VBA, Power Query). Built automated reporting systems reducing analysis time by 99% and delivered EGP 7M+ cost savings. MIT-educated with strong background in supply chain analytics, ERP optimization, and business intelligence dashboards. Translates complex datasets into actionable recommendations for C-level executives. Core Competencies: Business Intelligence • Predictive Analytics • Data Visualization • Database Management • Process Automation • KPI Dashboards • SAP Data Extraction • Statistical Analysis

## PROFESSIONAL EXPERIENCE

**Vivid Quest AI** | Remote (Jeddah, Saudi Arabia) | **Senior Data Analyst** | *May 2025 - Present*

- **Business Intelligence & Dashboarding:** Designed 15+ interactive Power BI dashboards tracking KPIs across sales, operations, and customer analytics, enabling real-time decision-making. Reduced reporting cycles from weekly to daily.
- **Predictive Analytics:** Built predictive models using Python (Pandas, NumPy, Scikit-learn) forecasting customer demand with 87% accuracy, reducing stockout incidents by 34%.
- **Database Management & ETL:** Managed SQL databases with 2M+ records, optimized queries reducing data retrieval time by 60%. Developed automated ETL pipelines consolidating data from CRM, ERP, and external APIs.
- **Sales & Revenue Analytics:** Analyzed sales data across 5 regional markets, identified underperforming segments, recommended strategies increasing revenue by 18% quarter-over-quarter.
- **Customer Segmentation:** Performed RFM analysis and clustering to segment customer base into 6 personas, enabling personalized campaigns improving retention by 22%.
- **Operational Efficiency:** Automated monthly reporting using Python and Power Query, eliminating 40+ hours of manual work monthly, improving data accuracy by 95%.
- **Stakeholder Communication:** Delivered data-driven presentations to C-suite executives, translating complex findings into business recommendations.
- **A/B Testing:** Designed and analyzed A/B tests for campaigns and features, providing statistical validation improving conversion rates by 15%.

**Tech:** Python, SQL, Power BI, Excel (VBA, Power Query), Tableau, Google Analytics

**ADL (Anastomsis Design Lab)** | Jeddah, Saudi Arabia | **ERP Data Analyst & Odoo Developer** | *Sep 2023 - Dec 2023*

- **HR Analytics Dashboard:** Developed HR analytics module in Odoo ERP tracking employee performance, attendance, recruitment metrics, and turnover. Automated reports reduced HR admin time by 50%.
- **Data Migration:** Extracted, transformed, and loaded 10,000+ employee records from legacy systems ensuring 100% data integrity through validation scripts.
- **Custom Reporting:** Built SQL queries and reports analyzing workforce utilization, project allocations, and labor costs across 15+ construction projects.
- **Process Optimization:** Mapped business processes, identified bottlenecks, implemented workflow automation reducing approval cycles from 5 days to 24 hours.
- **Data Governance:** Established data quality standards and validation rules ensuring consistency across HR, accounting, and project management modules.

**Tech:** Odoo (Python-based ERP), PostgreSQL, XML, Python, SQL

**Valoro** | Remote (Cairo, Egypt) | **Backend Engineer & Database Analyst** | *Dec 2021 - Nov 2022*

- **Database Architecture:** Designed SQL database for blockchain network infrastructure with 99.9% uptime. Optimized queries reducing transaction processing by 45%.
- **Blockchain Data Analytics:** Analyzed Hyperledger Fabric and Ethereum data identifying performance bottlenecks and transaction patterns. Developed dashboards tracking 50+ network metrics.
- **Data Pipelines:** Built pipelines using JavaScript and SQL to extract, analyze, and visualize network performance data, enabling proactive failure identification.
- **Technical Training:** Designed and delivered Solidity programming course to 30+ university students covering data structures and blockchain data management.
- **System Optimization:** Analyzed system logs to diagnose blockchain network issues, improving system reliability by 40%.

**Tech:** SQL (PostgreSQL), JavaScript, Hyperledger Fabric, Ethereum, Solidity, Python

**BASF Asia Pacific Service Center** | Malaysia | **Supply Chain Data Analyst** | *Aug 2020 - Oct 2021*

- **SAP Data Analytics:** Extracted and analyzed SAP ERP data for 5 countries (Thailand, Vietnam, Philippines, Korea, Singapore), managing 2,000+ monthly orders worth \$15M+.

- **Advanced Excel Automation (Key Achievement):** Developed VBA macros and Power Query automating daily reports, reducing analysis time from 4 hours to 1 minute (99.6% reduction). Processed 50,000+ rows daily with zero errors.
- **BI Dashboards:** Created monthly executive dashboards in Excel and Power BI visualizing order fulfillment, delivery performance, regional trends, and inventory turnover.
- **Root Cause Analysis:** Deep-dive analysis on order delays identified 3 critical bottlenecks, improving on-time delivery from 82% to 94%.
- **Demand Forecasting:** Analyzed historical order data identifying seasonal trends, supporting inventory planning and reducing excess stock by 15%.
- **Data Quality:** Implemented validation protocols ensuring 99% accuracy in order management, preventing shipping and billing errors.

**Tech:** SAP ERP, Advanced Excel (VBA, Power Query, Power Pivot), Power BI, SQL

### **Nissan Motor Egypt - SCM Department | Egypt | Inventory Data Analyst | Dec 2018 - Mar 2019**

- **Container Optimization:** Analyzed container utilization and part dimensions designing optimal loading configurations, increasing space utilization from 60% to 100%, projected EGP 7M+ annual logistics cost reduction.
- **Inventory Cost Analysis:** Comprehensive analysis of small-parts inventory using SAP exports and Excel modeling. Identified storage allocation and shipping inefficiencies.
- **Financial Modeling:** Built Excel models analyzing storage costs, scrapping rates, and logistics expenses. Recommendations led to 25% reduction in inventory holding costs.
- **SAP Data Extraction:** Extracted inventory data performing statistical analysis on 10,000+ SKUs identifying slow-moving items and optimization opportunities.

**Tech:** SAP ERP, Advanced Excel (Financial Modeling, Data Analysis), Statistical Analysis

### **Master's Thesis - Hanes Thailand | Malaysia | Supply Chain Analytics Researcher | Sep 2019 - Jun 2020**

- **Inventory Forecasting:** Designed predictive model projecting inventory across manufacturing and distribution network, improving visibility by 85%.
- **MRP Analysis:** Analyzed MRP system data identifying deficiencies causing stock-outs. Developed corrective algorithms enabling proactive management.
- **IoT Analytics:** Proposed IoT solution for real-time inventory tracking, demonstrating 40% lead time variability reduction through simulation.
- **Award:** Won Best Presentation Award at MIT Scale Expo 2020 Competition for measurable business impact.

**Tech:** Python, Statistical Modeling, Data Visualization, Excel

### **Microsoft Egypt | Cairo | Application Developer | 2015 - 2016**

- **Application Development:** Built 'Refugees' application using C# (.NET) with SQL Server backend managing 1,000+ user records.
- **Database Design:** Designed normalized SQL database schema for user profiles, resource matching, and location services.
- **Recognition:** Selected to showcase project to Microsoft CEO Satya Nadella, presented at Cairo ICT and UNDP Youth Summit.

**Tech:** C# (.NET), SQL Server, Database Design

## **EDUCATION**

### **Master of Science in Supply Chain Management | MIT-Malaysia Supply Chain Management Program | June 2020**

Malaysia Institute for Supply Chain Innovation, Shah Alam, Malaysia • Thesis: Best Presentation Award - MIT Scale Expo 2020

### **Bachelor of Science in Computer and Software Engineering | Helwan University | May 2015**

Faculty of Engineering, Helwan, Egypt • Focus: Software Development, Database Systems, Algorithms

## **TECHNICAL SKILLS**

**Data Analytics & Visualization:** Python (Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn), Power BI, Tableau, Advanced Excel (Power Query, Power Pivot, VBA Macros), Google Analytics, Statistical Analysis, Predictive Modeling  
**Database & BI Tools:** SQL (PostgreSQL, MySQL, SQL Server), SAP ERP, Database Design & Optimization, Data Modeling, ETL Pipelines, DAX, KPI Dashboards, Reporting Automation  
**Programming & Development:** Python, JavaScript, C# (.NET), Solidity, VBA, SQL, XML  
**ERP & Business Systems:** Odoo Development, SAP ERP Implementation, Process Automation, System Integration  
**Analytics Methodologies:** Descriptive/Predictive/Prescriptive Analytics, A/B Testing, Statistical Hypothesis Testing, Data Mining, Customer Segmentation, Forecasting, Root Cause Analysis

## **KEY ACHIEVEMENTS & LANGUAGES**

✓ 99.6% Efficiency Gain: Reduced daily reporting from 4 hours to 1 minute ✓ SAR 7M+ Cost Savings: Container optimization project ✓ 15+ BI Dashboards: Executive dashboards for real-time decisions ✓ 87% Forecast Accuracy: Predictive models for business planning ✓ MIT Award Winner: Scale Expo 2020 Best Presentation ✓ 2M+ Records Managed: Large-scale database management ✓ Languages: Arabic (Native), English (Fluent)

*References available upon request*