Mustafa Alsaegh

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EDUCATION

Indiana University Bloomington   AUG 2021 - MAY 2024
Master of Science in Data Science; CGPA: 3.9/4
Course Work: Applied Algorithms and Data Structures, Data Mining, Elements of Artificial intelligence, Computer Networks,
Applied Machine Learning, Security for Network Systems, Advanced Database Technologies, Distributed Systems
Indiana University East   JAN 2016 - MAY 2020
Bachelor of Science in Business Administration; CGPA:3.7/4

SKILLS

Languages and Databases: SQL, Python, JavaScript, Power BI, R (Shiny, data.table), Excel (Advanced), SAS, PHP,
Technologies/Frameworks: Oracle SOQ, Pandas, Numpy, React, Node, Docker, Redux, Hibernate, Spring, Spring Boot, **Data Integration:** REST APIs, JSON, ETL Pipelines, Docker, Kubernetes
Certifications: Power Platform Functional Consultant Associate, Dynamics 365 Fundamentals, Explorance Blue Expert, Microsoft Power BI Data Analyst Associate

WORK EXPERIENCE

Ellucian - Washtenaw Community College

Database Specialist   APR 2024 - **Present**
- Extract and analyze academic data from Banner and SQL databases to deliver 800+ faculty-specific reports, feeds, and live **Power BI dashboards** for the Dean's office and Board of Trustees.
- Designed automated reporting pipelines in **SQL, Excel, and Python**, reducing manual processing time by 60% and improving timeliness of reporting.
- Partner with deans, faculty, and administrators to develop **data visualizations and presentations** supporting enrollment planning, retention, and student success initiatives.
- Configured and customized **Ellucian CRM Recruit workflows** to optimize the admissions lifecycle and lead tracking.
- Built **ServiceNow–Banner integrations** using REST APIs, ensuring cross-platform academic data access and compliance with FERPA/GDPR.

Indiana University- Bloomington

Machine Learning Researcher (CNA)   AUG 2021 - APR 2024
- Supported multidisciplinary research with longitudinal survey and biological data management.
- Generated insights from existing data using Python [Plotly, Seaborn, Matplotlib], R Shiny, and Power BI.
- Built and enforced user access protocols across 5 departments; conducted quarterly audits ensuring FERPA & GDPR compliance.
- Maximized quantitative reporting with **batch processing pipelines**, cutting data processing time by **40%**, and enabling faster data transformations, visualizations, and statistical analysis for improved decision-making.
- Enhanced performance in **data wrangling** by **35%** using fast and memory efficient libraries such as data.table in R.

IQVIA (Formerly IMS Health) – Kuwait

Data Analyst (Ongoing Client Delivery)   MAY 2012 - JAN 2015
- Analyzed 5TB+ health & insurance data in high performance computing environments for achieving research objectives.
- Participated in business process documentation writing/reviewing, requirement analysis, translating business requirements to code in systems & modules development using ETL tools of BI Development Studio.
- Optimized, automated efficient ETL processes by data warehousing, 20+ SSIS packages & stored procedures, reducing production time from 2 hours to 15 minutes
- Served as technical lead of 5+ projects, managing resources (agile scrum system), testing business logic by analyzing data & functional specification, handling change requests & quality assurance

SELECTED PROJECTS

WCC, Upcoming Surveys Dashboard - Developed in Power BI, integrated Banner & Canvas API data
Designed live Power BI dashboards integrating enrollment and faculty data, allowing department heads to monitor survey participation and enrollment. Deployed within 4 weeks, adopted by board of trustees and deans across all divisions.

WCC, Student Demographics Mapping - Built geospatial maps in Power BI + Python (geopandas)
Built geospatial analyses of student locations (domestic and international) to support resource allocation and enrollment planning.

Indiana University, Admissions Pipeline Analysis - (Power BI, SQL, SSIS, R Shiny, Python, APIs)
Automated reports integrating Banner and CRM Recruit data, helping admissions track application lifecycle from inquiry to enrollment.