

Hafizullah Mahmudi

(351) -231-2379 || hmahmudi@outlook.com || <https://www.linkedin.com/in/hmahmudi/>
Green Card holder, eligible to work in the United States without employer sponsorship

Experience in Data Analytics | HMIS Data Systems | Power BI | Tableau | Python | SQL

Results-oriented Data and BI Consultant with 16+ years of experience supporting data systems for HMIS (maternal, newborn, child, and adolescent health (MNCAH), HIV, EPI, TB, nutrition), and health financing. Skilled in developing and managing databases, building ETL pipelines, implementing data quality and governance frameworks, and producing impactful analytics for public health decision-making. Strong record of consulting with UNICEF, MSH, and MoPH in different health projects.

SKILLS

Engineering & Analytics: SQL Server, Power BI, Power BI Service, Semantic Modeling, SSIS, SSRS, Microsoft Fabric, Excel (PivotTables, VLOOKUP), Power Query, PostgreSQL, DAX, Python, REST APIs.

Software Development: .NET Core, ASP.NET MVC, C#, Entity Framework, REST APIs, Git, JavaScript

Data Governance: Master Data Management (MDM), Data Validation, Data Quality Assurance, Logging & Auditing

Data Analytics & Reporting: KPI Design, Interactive Dashboards, Trend Analysis, Report Automation

Languages: English (fluent), German (intermediate), Dari (native)

PROFESSIONAL EXPERIENCE

Power BI & Data Engineering Consultant | 07/2024 – 11/2024 | Organization of Humanitarian Initiatives (Remote/Germany) – Afghanistan

- Designed and implemented a data warehouse by modeling data structures, optimizing storage management and ensuring data integrity across multiple sources.
- Developed customized ETL processes that optimized data extraction, transformation, and loading, saving thousands of dollars by eliminating the need to purchase off-the-shelf ETL tools.
- After completing the requirement analysis, I identified key business metrics and developed dashboards for both analytical and strategic reporting, improving overall decision-making.

Business Intelligence Developer / Data Quality Consultant | 09/2022 – 08/2023 | UNICEF (Remote/Germany) – Afghanistan

- Developed and maintained foundational semantic models in Power BI to support enterprise-wide reporting and analytics.
- Integrated data from over 4 mother and child related nutrition source systems into a centralized BI platform, improving report consistency and reducing siloed data.
- Designed data validation rules and implemented automated checks, improving overall data quality by 15%.
- Collaborated with program teams and leadership to define performance metrics for children and maternal health, ensuring alignment with strategic objectives.
- Advised on data governance practices, standardizing KPI definitions and ensuring accuracy and trust in reports across departments.
- Contributed to the organization's data quality by enforcing data validation, error logging, relational integrity, and data profiling.

Business Intelligence Engineer / Digital Health Solutions Lead | 09/2020 – 10/2021 | Management Sciences for Health – US Based, Afghanistan

- Led the design and implementation of data quality strategies and BI infrastructure to enhance reporting accuracy and support executive decision-making.
- Supervised cross-functional teams (Data engineers, data quality experts, and visualization specialists) to deliver end-to-end analytics solutions across digital health programs.
- Provided technical leadership on HMIS (maternal, newborn, child, and adolescent health (MNCAH), HIV, EPI, TB, nutrition), EMRs, and database optimization (SQL Server, PostgreSQL), ensuring data integrity and system interoperability.
- Defined and implemented data governance practices related to reporting and dashboard delivery, ensuring consistent metrics across teams.
- Developed and aligned key health indicators and performance metrics with strategic plans, supporting long-term organizational objectives.
- Acted as a liaison between internal departments and external partners to align on data architecture, integration pipelines, and reporting standards.

Power BI & Data Visualization Consultant | 01/2020 – 08/2020 | The Palladium Group – US Based, Afghanistan

- Designed and implemented data warehouse architecture and dimensional data models (star schema) to support scalable, high-performance analytics solutions.
- Collaborated with stakeholders to create sophisticated dashboards, translating complex data into clear visual insights.

- Designed and implemented an advanced interactive Power BI dashboard encompassing over 32 reports, greatly enhancing data visualization and driving more informed decision-making
- Oriented client's technical team, empowering them to leverage newly developed dashboards to facilitate the planning.

Nutrition Database (NIS) Developer/Consultant | 11/2018 - 12/2019 | UNICEF, Afghanistan

- Led the full project lifecycle for a comprehensive nutrition management system, from initial requirements gathering to final implementation.
- Gathered and documented detailed requirements through document reviews, stakeholder meetings, and cross-functional coordination to ensure alignment with user needs and project objectives.
- Designed and developed a robust SQL Server database with a normalized schema for performance and data integrity, and engineered a custom ETL process to seamlessly migrate legacy data.
- Built a full-featured web application using ASP.NET MVC Core and Entity Framework, incorporating dynamic reporting features to enable customized analytics as well as pivot tables.

Health Expenditure MIS Developer / BI Analyst | 01/2016 - 10/2018 | Ministry of Public Health, Afghanistan

- Led the full project lifecycle for a Health Expenditure MIS, supervising 3 developers and streamlining the design, development, and maintenance of the Health Expenditure and Contract databases, which reduced data collection and processing time by 50%.
- Engineered a robust ETL process for seamless data migration from legacy systems to a new SQL Server database, ensuring data accuracy and integrity.
- Developed 20+ reports, presentations, and interactive dashboards with tracer indicators to support efficiency analysis, healthcare cost evaluations, and other data-driven decision-making.

Pharma. Information Systems Lead | 06/2012 - 12/2015 | Management Sciences for Health, Afghanistan

- Led and supervised a team of 4 developers in the full-cycle development of four regulatory and supply chain management systems covering pharmacy outlet registration, pharmaceutical supply, medicine registration and import, and quality control monitoring.
- Mapped and integrated the WHO ATC/DDD Database for Afghanistan to enhance regulatory compliance and improve data accuracy.
- Established and managed multiple databases—including Pharmaceutical Registration and Logistics, pharmacy outlet inventory, and an expanded licensed and essential medicines database—to streamline registration, tracking, and quality control of pharmaceutical supplies.

MIS Specialist / Master Data Management | 04/2008 - 05/2012 | Management Sciences for Health, Afghanistan

- Directed the end-to-end development of 12 national and sub-national database applications—including HMIS, Surveillance, and TB Information Systems—overseeing design, implementation, and administration, while upgrading HMIS modeling and executing custom ETL processes to manage over 2,000 data flows across 100+ copies.
- Designed and implemented a comprehensive Data Warehouse architecture, integrating Master Data Management files and data marts to centralize data management and ensure uninterrupted, secure information flow for all stakeholders.
- Led the identification of key metrics and report parameters, developing complex queries, detailed data reports, and analytics that delivered actionable insights and drove informed decision-making.

EDUCATION

09/2019 – 08/2021 Master of Science in Data Science, Liverpool John Moores University+ IIITB (Online)
 04/2011 – 12/2014 Bachelor of Science in Computer Science, Kateb University, Kabul Afghanistan
 06/2005 – 06/2006 Diploma in Business Administration, Kardan University, Kabul Afghanistan

CERTIFICATIONS

10/2016 Microsoft Certified: Implementing a Data Warehouse and Designing BI Solutions
 09/2023 Microsoft Certified: Power BI Data Analyst Associate
 06/2024 Microsoft Certified: Fabric Analytics Engineer Associate

LANGUAGES

English German Dari

RESEARCH CONTRIBUTIONS

Leveraged AI-driven machine learning algorithms (XGBoost, LightGBM, CatBoost) in my graduate research to analyze credit default risk and enhance model performance.
 02/2023/IEEE Evaluation of Gradient Boosting Algorithms on Balanced Home Credit Default Risk (primary author)