

HAMZA KHALID

London, England, United Kingdom

Mobile: 07845520000 Email: hamzakhalidd@outlook.com

LinkedIn: www.linkedin.com/in/hamzaakhalid

Summary: I work in the data consulting industry, supporting government bodies and enterprise clients using data management, data modelling, machine learning, geo-spatial analysis, and data dashboards. I have worked with geo-spatial, real-estate, pharmaceutical and banking data using Python, Power BI and SSRS: facilitating real-time insights and informed decision-making for key-stakeholders. I am a passionate learner, consistently filling my knowledge gaps across the software engineering lifecycle.

PROFESSIONAL EXPERIENCE

Senior Associate (Data Science and Analytics), EY - Ernst & Young (MENA)

Nov 2022 - Ongoing

Delivered data-driven solutions for Dubai's economic reporting (Dubai's Tourism Department), optimizing inventory, real-time insights, and risk mitigation in oil & gas, and supported large-scale housing analytics for government bodies (World Bank)

- Developing an Economic Reporting Framework dashboard for Dubai's Department of Economy and Tourism, integrating 50+ KPIs into Tableau to enhance strategic visibility and improve reporting efficiency.
- Achieved a 50% inventory reduction in the oil & gas sector by implementing strategic analysis using ML Modelling and real-time dashboards using Power BI and SSRS, reducing stockout risks through lead time analysis.
- Automated data processing for the Sindh People Housing initiative, managing data acquisition from multiple sources into a SQL data warehouse, resulting in a 35% increase in process efficiency measured by reduced manual effort and faster data throughput.
- Spearheaded the implementation of data pipelines using Python, SQL, Azure and Power BI for the World Bank for real time insights, enhancing resource allocation and personnel deployment efficiency through machine learning and geo-spatial analysis.

Business Intelligence Analyst, BLUTECH Consulting (Pakistan)

Aug 2022 - Nov 2022

Supported data management and modelling for Tier-1 banking clients.

- Streamlined data management for banking clients by transforming raw data using SSIS for ETL processes, managing data warehousing with SQL, and constructing robust data models with a star schema in Power BI for enhanced querying and reporting capabilities.

Data Automation and Forecasting Intern (Internship), DireKtions (Pakistan)

Feb 2022 - May 2022

Worked on enterprise projects for web-scraping, time series forecasting and speech-to-text use-cases.

- Enhanced data acquisition by automating web-scraping with Selenium, Scrapy and Python scripts, advanced predictive analytics through time series forecasting with FB Prophet, and broadened user interaction capabilities by integrating speech-to-text functionality using APIs, Assembly AI and IBM Watson Studio.

Data Analyst Intern, Frontier Technology Solutions (Pakistan)

Jan 2021 - Aug 2021

Selected as the sole intern to contribute to an international project due to my strong data analysis skills.

- Developed web scrapers and automation scripts to process pharmaceutical data, improving data collection efficiency and contributing to end-to-end software development with Python, Streamlit, Django, and Flask.

LEADERSHIP AND EXTRACURRICULARS

- **Academic Excellence:** Dean's List scholar, ranked 4th in CS program, recipient of prestigious International Postgraduate Award (50% funding) for outstanding academic achievement.
- **Technical Innovation:** Developed and published a Python package for data science and analytics.
- **Leadership:** Led teams in academic, corporate sports event, regional level sports, and for data dashboarding for housing sector.

SKILLS / CERTIFICATIONS

Technical skills: Programming Languages (Python, R), Data Analysis (Time-series forecasting, Exploratory Data Analysis, Geo-Spatial Data Analysis), Machine Learning & AI (Machine Learning, Deep Learning and Generative AI), Data Management (SQL, SSRS, SSAS), BI & Data Visualization (Tableau, Power BI), ETL and Automation (SSIS, Selenium, Scrapy, Beautiful Soup), Cloud (Microsoft Azure), Operations (Basics of DevOps and ML Ops), Web Development Frameworks (Anvil Works, Streamlit, Flask)

Certifications: EY's Artificial Intelligence academy – A.I. Engineering, EY's Analytics academy – Data Integration

EDUCATION

MSc Data Science, University of Gloucestershire, United Kingdom (Expected: Distinction)

Sep 2023 - Ongoing

Modules include Ethical Data Science, Machine Learning and Optimization, Applied Data Analysis and Research Methods.

- Dissertation (On-going): Deep learning applications in cardiac diagnosis through Myocardial Perfusion Imaging.

B.S. Computer Science, Karachi Institute of Economics & Technology (PAF KIET), Pakistan (1st Class)

Jan 2019 - Feb 2023

Relevant Modules include Object oriented programming, Data structures, Databases and Management and Machine Learning.

- Capstone project (Ranked under Top 10 within my batch): Comprehensive health solution, utilizing data science to build a multi-disease predictor, precaution recommender, and informative dashboard for Pakistan's regions, all under a supervision of a senior doctor.

PORTFOLIO PROJECTS

Inventory Management System: Built custom desktop applications (Python, Tkinter, Firebase) for managing inventory, finances, and vendors for private clients. Features included stock tracking, payments, balance sheets, and customizable data views using SQL queries on Pandas Data Frames.

IoT Devices Malicious Attack Detection (Research Purpose): Developed and Compared supervised and unsupervised ML models to identify malicious activity in data from various IoT devices. Utilized 7+ models for high-accuracy detection on large datasets.