Muhammad Bilal

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Summary

I am a Software Engineer + Data Architect, have 11+ years experience in Healthcare industry and 2 years experience in Automobile industry, I m working for various companies as a freelancer.

My Tech stack:

Frontend:
- ReactJS, Bootstrap, HTML5

Backend:
.NET CORE, ASP.NET MVC, Web API, WCF, C#

DevOps + Cloud Infrastructure:
Kubernetes, Docker, GCP Stack (Cloud Functions, Cloud Run, BigQuery, Cloud Build), Azure, AWS

Data Stack:
BigQuery, SQL, PostgreSQL, MySQL, Oracle

Healthcare:
PACS, DCM4CHEE, Dicom Viewers, Ohif, HL7, Mirth

Experience

Founder
ABMTEC
Sep 2022 - Present (5 months)

Data Architect
JoshTeam
Dec 2020 - Present (2 years 2 months)
- Create and maintain data pipelines as per the industry best practices.
- Work on large databases, Identify and optimize data delivery, re-designing infrastructure for greater scalability.
- Build the infrastructure required for optimal extraction, transformation, and loading of data from a wide variety of data sources using SQL and GCP 'big data' technologies.
- Use the modern day cloud based ETL tools such as Data Fusion/Cloud Functions/Data Flow and StitchData
- Work with the Business Intelligence Head to surface data for actionable insights, automation and future needs.
- Work with stakeholders including the third-party vendors to assist with data-related technical issues and support their data infrastructure needs.

- Ensure that data is available through data tools for analytics such as QlikData/PowerBI for consumption across the organization.
- Working with business and data teams to analyze data
- Build and maintain data models on BigQuery, BigTable and other GCP databases
- Manage data processing using Windowing and/or data process workflows
- Manage and maintain large datasets
- Support in architecture of data migration and/or cloud migration strategies such as AWS S3 to GCP Cloud Storage

Specialist EHR Implementation
Sindh Institute of Urology and Transplantation
Jan 2020 - Aug 2022 (2 years 8 months)
- Support the implementation of the EHR by defining customer existing workflow and process analysis.
- Develop a practice system for the clinicians, front desk staff to shift from manual practice to a computer based system to keep us ahead of process change while the actual EHR is being deployed phase wise.
- Being responsible for the technical design for core platform development projects by reviewing and contributing to business requirements, workflow, design, code, execution and go-live.
- Provide leadership and subject-matter expertise to working groups responsible for clinical and/or business process workflow re-design and configures the outcomes within the EHR solution in order to support and enhance patient care processes.
- Act as a mentor for the use of technology and health information to improve clinical processes and the seamless integration of technology into the work style of front line clinician.
- Keep up-to-date knowledge of the health informatics industry, trends and health care standards; develop awareness, commitment and acceptance of emerging and innovative technologies and systems that support excellence in the delivery of healthcare

Deliverables:
- Practice Management System – ReactJs/.net Core/MSSQL (Product Owner)
- Content Management System – Alfresco
- PACS – DCM4CHEE ARC 5
- Customized OHIF viewer

Programmer Analyst
Aga Khan University
Jan 2016 - Dec 2019 (4 years)
Departments:
- Department of Software Development and Maintenance
- Department of Solutions & Innovation

Responsibilities:
- Work as part of an Agile software development team.
- Design, develop, test, maintain and support software solutions for hospital-wide healthcare services.
- Work as a full-stack developer also serve as principal engineer for designated EMR/EHR modules – RIS/PACS/PHA.
- Develop applications using .net framework, .net core, C#, ReactJS, NodeJS, JAVA (Android Native) with databases such as Oracle Db, MySql, MSSQL
- Follow best practices to ensure data privacy and security.

- Contribute to documenting our processes, designs, and guidelines.
- Contribute to continuous improvement activities.
- Conducts testing and debugging to ensure application meets specifications.
- Supports software development lifecycle, and applies and follows appropriate programming/ development methodologies and best practices.
- Participates in project planning and implementation.
- Interact with end-user and provide solution as per their business requirement
- Manage end user change requests
- Use version control(Git/TFS/PVCS) for all the changes in the systems
- Use CI/CD tools for the container based deployments

Major Deliverables
- EMAR Module in MyPatients@Aku App (Physician Portal)
- RIS module in FamilyHifazat portal (Patient Portal)
- Clinical Queue System
- Integrated Service Manager
- OHIF PACS Viewer Integration

Analyst
Aga Khan University
Apr 2015 - Jan 2016 (10 months)
Department:
Aga Khan Hospital for Women & Diagnostic Center Garden

- Act as a point of escalation for all kind of issues related network links and equipment, servers, Patient Care Applications and Communication System.
- Provide technical support for Business re-engineering process and help improve system efficiency and remove redundancies.
- Participate in annual budget cycle for replacement / procurement of new IT and its related equipment
- Provide training to end-user.

Technician
Aga Khan University
Nov 2013 - Mar 2015 (1 year 5 months)
Department:
Aga Khan Hospital for Women & Diagnostic Center Garden

• Performs all functions required to prepare and install PCs and related equipment, including connections to the data communications network
• Performs local and remote testing on equipment, including running computer programs to diagnose faults.

Hardware Technician
Aga Khan University
Jan 2010 - Oct 2013 (3 years 10 months)
Department:

Aga Khan Hospital for Women & Diagnostic Center Garden

Education

Karachi University

Master's Degree, Computer Science

2012 - 2014

Virtual University of Pakistan

Bachelor's Degree, Computer Science

2008 - 2011

Govt National College, Karachi

High School, FSc Pre-Engineering

2006 - 2008

Badri High School

High School, Computer Science

2004 - 2005

Licenses & Certifications

Leading Quality Improvement: Essential for Managers - Institute of Health Care Improvement

Duolingo French Fluency: Beginner (Estimated) - Duolingo

Telemedicine Training @ Bangkok - Trueeventus

Blockchain Developer Certification - Edureka

C82HG2US

IELTS - English Proficiency Exam - IELTS Official

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Skills

Microsoft Azure • Google Cloud Platform (GCP) • Blazor • Database Design • React Hooks • Google BigQuery • Amazon Web Services (AWS) • Team Management • Microsoft Office • Teamwork