

# M. Bilal Sadiq

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## CAREER FOCUS

Business Analyst with over 2 year of experience supporting business solutions software and analyzing business operations. Aiming to utilize my strong prioritization skills and analytic ability to achieve the goals of your company. Possess a MS in Computer Science and Bachelor in Commerce and Computer Science.

### Entrepreneurship

**MobiGas Start-up:** KAUST Taqaddam (University Start-up Accelerator Program). Developed a hardware and software based gas usage monitoring and automatic ordering platform for home delivery of gas cylinders. Graduated to the last stage from among 27 teams.

### Research Publications

Google Scholar: <https://goo.gl/RGmbbp>, IEEE Digital Library: <https://goo.gl/1HvBn9>, ACM Digital Library: <https://goo.gl/ajAsB6>, DLBP CS bibliography: <https://goo.gl/L9qTwx>

## PROFESSIONAL OVERVIEW

### Business Systems Analyst Role

- ◆ Defined functional and technical requirements, modeled business processes while applying structured and object-oriented analytic techniques
- ◆ Created system proposals, feasibility / alternative analyses with software and hardware selections, and performance and transaction analyses

## PROFESSIONAL EXPERIENCE

I dive deep into various fields and produce several new innovative ideas. My job is not limited to research rather manage and execute the software development life cycle process in team environment and foresee market trends for business opportunities.

- Experience with the SDLC is required and an understanding of PHP, .NET and Java development
- Experience with the agile methodology
- Experience with Domain Driven Design and data modeling
- Expert in knowledge of SQL and relational database management softwares

**Deliverables:**

- Plan, design and recommend business processes to improve and support business activities.
- Analyze and documents client's requirements and processes and communicate these requirements by constructing conception data and process model, including data dictionaries and volume estimates from organizations.
- Create test scenarios and develops test plans to be used in testing the business application in order to verify that the client requirements are incorporate in to the system design.
- Provide input in developing and modifying system to meet client needs and develop business specification to support these modification.
- Facilitates meeting with cleints to gather and document requirements and explore potential solutions.
- Assit in coordinating information technology projects and provide support to other team memebers.
- Lead requirement elicitation efforts on enterprice analysis projects.
- Translate stakeholders requiremnts into various documentations deliverables such as functional specifications, use cases, user stories, work flow/process diagrams, data flow/data model diagrams.

**Researcher****Umm Al-Qura University, May. 2012 – July 2016**

- Working on writing a server paper on Wireless Visual Sensor Network. The focus of this survey is on exploration of communication, processing and transmission, and coverage for deployment of VSN. Few of the research objectives include 1) how VSN is distinguish from WSN? 2) Can the knowledge gained by the wireless sensor network be used in the development of VSN? 2) What is the best way to manage large number of cameras in efficient and scalable manner? Etc.

*The motivation for this research is to gain deep insight of the various technologies and techniques involved in this field, in order to implement a VSN to monitor and track Hajj event for various application such as crowd and transport management.*

- Integrated Body Area Network (IBOS) resrach project use standard health sensors that measure blood pressure, blood glucose, heart-rate, temperature, pulse oximetry, weight-scales, and body composition.

*Different health sensors are purchased and tested the hardware integration and efficiency. The requirements analysis phase is completed and working on mobile application is in implementation phase to receive all the data to generate health reports.*

- Cerebral Palsy, trauma, and strokes are common causes for the loss of hand movements and the decrease in muscle strength for both children and adults. Improving fine motor skills usually involves the synchronization of wrists and fingers by performing appropriate tasks and activities. This demo introduces a novel patient-centered framework for the gamification of hand therapies in order to facilitate and encourage the rehabilitation process. This framework consists of an adaptive therapy-driven 3D environment augmented with our motion-based natural user interface. An intelligent game generator is developed, which translates the patient's gestures into navigational movements with therapy-driven goals, while adapting the level of difficulty based on the patient profile and real-time performance. A comprehensive evaluation and clinical-based assessments were conducted in a local children disability center.

*Developed plans to implement a therapy driven 3D environment management solution. The system operates as a multi-tier Web-based application help to create, modify, and control patients thera sessions during a full life cycle of treatment. The patients thera sessions are stored in the database and the doctor can view session and annotate observations. The system serves as negotiators, therapy based game creator, and history management.*

*Monitored and communicated the progress of software consultants and systems infrastructure staff in customizing and setting up software and servers. Determined and initiated corrective actions when faced with project issues and risks.*

**Projects**

1. Dr. Md. Abdur Rahman, Dr. Mohamed Mokbel, and Dr. Thanaa Ghanem, "A System for Querying, Analyzing, and Visualizing Real-Time Social Network Data?", KACST NPSTI Grant, Total 2 million SAR, September 2014

2. Dr. Abdelmajid Khelil, Dr. Salah Aly, and Dr. Mohamed Abdur Rahman, "HajjMemo: Pilgrims-Sourced Data Collection for Documentation and Continuous Improvement of Hajj & Umrah Services", KACST NPSTI, Total 2 million SAR, January 2014
3. Dr. Md. Abdur Rahman, Dr. Saleh Mohammed Saleh Basalamah, Dr. Walid G. Aref, and Dr. Mourad Ouzzani, "Query Processing and Optimization in Spatiotemporal Database Systems", KACST NPSTI Grant, Total 2 million SAR, November 2013

*Defined users objectives, business needs and scope, and systems requirements for project. Provided work schedules for project. Documented project risks and issues. Communicated project status and made corrections where effort was off-track. Created a project plans and work schedules. Monitored and communicated project status. Gathered functional and non-functional requirements for a bigdata management system. Surveyed off-the-shelf bigdata management solutions and made recommendations based on the analysis. Initiated implementation of a bigdata solution by a vendor / service provider.*

## **Database Manager**

**Pakistan Science and Technology, Mar. 2010 - Jun. 2011**

### Project

1. Comprehensive Database on S & T Organizations, Manpower and Performance Evaluation of R & D Organizations, Total 3.7 million Rs.

*Assist the Deputy Project Coordinator for developing a comprehensive questionnaire. Assist the Deputy Project Coordinator for the successful completion of database and software development. Engage in the process of data collection, data verification and data analysis. Design and develop the structure of the database along with existing manpower of PCST. Coordinate with the peer review teams.*

## **Senior Programmer**

**Pakistan Science and Technology, Feb. 2008 - Mar. 2010**

*Supervise network design and deployment, hardware and software server system installation and maintenance (Linux, Windows 2003 Server, Oracle, Exchange Server, ISA Servers). Application Software Development. Database Design, Structuring and Optimization. Procurement of hardware equipment and software. Managing to deploy all server hardware and software. Network infrastructure design, deployment and installation. Testing of all hardware and network equipment.*

## **Manager IT**

**Capital FM Pvt. Ltd., Dec. 2003 - Jan. 2008**

- Supervised construction of Internet website for Radio FM industry. Developed a dynamic online radio station. Developed an account system for radio industry specifically. Developed a payroll system. Traffic control system for the radio (adds management system). Managing the computer network infrastructure (Lahore, Karachi, Hyderabad and Islamabad).

*Defined project plans and schedules, monitored progress and made adjustments to accommodate changes in requirements, scope, and available resources. Coordinated engineers in developing and integrating software; and in implementing a server and network infrastructure. Custom application systems were based on PHP, MYSQL, Apache, WebLogic, Websphere.*

## **EDUCATION & AFFILIATIONS**

- ♦ Master of Science (Computer Science), Iqra University Islamabad Pakistan
- ♦ Bachelor in Commerce, Rawalpindi College of Commerce Rawalpindi Pakistan
- ♦ Master in Computer Science Hamdard University Islamabad Pakistan

## **INDUSTRY & BUSINESS PROCESS EXPOSURE**

Internet / E-Commerce	Smart Cities	Intelligent Transportation System
Banking / Financial Services	Human Resources	Geographic Information Sys. (GIS)
Warehouse / Logistics	Marketing / Sales Services	Indoor Navigation
Accounting / Finance	Document Management	Bigdata
Computerized Maintenance Management System	Facility Management System	E- Helath

## APPLICATION SOFTWARE EXPOSURE

Microsoft Project	Virtualbox	Microsoft Visio	PHP
Texmaker	Hadoop	Microsoft Access	Apachi
Adobe Dreamweaver	Eclipse	Microsoft SQL Server	MySQL
API Testing Fiddler4	Amazon Services EC2, SQS, S3, DynamoDB	Microsoft PowerPoint	ERWin

## PERSONAL CHARACTERISTICS

- ♦ Able to deal with either high-level business issues or technical details
- ♦ Works well in team-oriented or independent environments
- ♦ Active explorer of alternatives and improviser when faced with project challenges
- ♦ Creative, analytic problem solver that views issues from multiple angles
- ♦ Customer service-oriented
- ♦ Strong belief in value of on-going staff training, education, and mentoring

## SKILLS & METHODS EXPOSURE

Project Planning	Budgeting	Issue & Risk Management	Rational Unified Process ( RUP )
Requirements Analysis	Use Cases	ER / Data Modeling	Object-Oriented Analysis
Process Modeling	Decision Support	Change Management	Business Process Re-engineering