



# Basharat Hussain

## IT Solution Architect & Lead, Lecturer

### Professional Summary

#### Address

H.#B-648, Phase#5,  
Officers Colony,  
Wah Cantt, Pakistan.

#### Mobile & Mail

+92 300 510 6398  
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#### Design/Arci.

DDD, Design Patterns,  
Layered, Onion,  
Event-driven, SOA,  
Enterprise Architect,  
Micro-Kernal, Draw.io,  
UML, RabbitMQ, Grpc,  
SignalR, Messaging,  
Cloud Computing

#### Technologies

.NET Core, C#,  
ASP.NET Core, Web  
Services, WebAPI,  
JSON, JQuery, JS,  
HTML5, LINQ, VC++,  
COM/DCOM, STL,  
VB6, Java, Angular,  
Typescript, React, SQL  
server, Postgres,  
MySQL, DB2,  
MongoDB, WCF,  
WinForm, SOA,  
ADO.NET, GraphQL,  
Microservices,  
Resharper, TFS, GIT,  
DevOps, Cloud-based  
Models, Python

More than 24 years of experience in the software industry, working as an Architect, Designer, and Analyst for highly available, scalable, and robust enterprise Applications.

Experience in leading and managing project teams from inception to go-live phases. Exceptionally vital skills in building complex and highly available product architectures by utilizing domain-driven and service-oriented application styles.

Experience working with Fintech Banking Apps, Anti-money laundering, Rule-based Compliance, and Data processing. Experience in designing highly scale-able, plug-able architectures using RabbitMQ, Event/delegates, SignalR, and Grpc frameworks for large-scale projects.

Working as a Senior Lecturer with the Faculty of Computing, Riphah International University, Islamabad. Research interests: ML, AI, Data Analysis, Blockchain, IoT, and Vertical Federated Learning.

### Education

- |             |  |                                |
|-------------|--|--------------------------------|
| 2019 - Now  | <b>Pursuing PhD in Computer Science</b>                          | COMSATS University, Wah Campus |
|             | Interests: Deep Learning, Federated Learning, Traffic Prediction |                                |
| 2014 - 2016 | <b>Distinction, M.S. Degree in Computer Science</b>              | IIUI, Islamabad                |
| 2008 - 2008 | <b>Software Project Management (Course)</b>                      | CASE, Islamabad                |
| 1998 - 2001 | <b>Master's Degree in Computer Science</b>                       | IIUI, Islamabad                |

### Academic Experience

- |             |   |                  |
|-------------|---|------------------|
| 2024 - Now  | <b>Lecturer, School of Computing, FAST NUCES, Islamabad.</b>        | Permanent        |
|             | Cloud Computing, Data Mining, Software Engineering                  |                  |
| 2020 - 2023 | <b>Senior Lecturer, Riphah International University, Islamabad.</b> | Permanent        |
|             | Software Design & Architecture, Web Development, Cloud Computing    |                  |
| 2016 - 2017 | <b>COMSATS University (Wah campus), Wah Cantt.</b>                  | Visiting Faculty |
|             | Software Engineering, Web Engineering, Computational Intelligence   |                  |

### Research Work

B. Hussain, M. K. Afzal, S. Ahmad and A. M. Mostafa, "A Novel Graph Convolutional Gated Recurrent Unit Framework for Network-based Traffic Prediction," in IEEE Access, 2023, doi: 10.1109/ACCESS.2023.3333938.

B. Hussain, M. K. Afzal, S. Anjum, I. Rao and B. S. Kim, "Intelligent Traffic Flow Prediction Using Optimized GRU Model," in IEEE Access, vol. 9, pp. 100736-100746, 2021, doi: 10.1109/ACCESS.2021.3097141.

## Domains

Deep Learning,  
Blockchain, AI,  
Encryption, Fin-Tech,  
Biometric  
Authentication,  
eVoting, Raspberry  
Pie, BPM, Insurance,  
Fuzzy Logic, Neural  
Networks,  
eCommerce,  
Appointment Booking,  
GDPR, Security,  
Compliance, FinTech,  
Peer-2-Peer Apps,  
Data Scrapping,  
Selenium, Cloud  
Computing, DevOps,  
Data Analysis, AI, ML,  
IoT, Vertical Federated  
Learning

## Work Experience

- 03/19 - 02/20 **Team Lead / Architect / Developer** [Self Employment](#)
- Design and architecture of the client project from beginning
  - Developed a notification framework using SignalR and real-time tracking.
  - Schema design of the Asset tracking system in MongoDB
  - Ensuring successful quality and user acceptance acceptance testing
- 03/17 - 02/19 **Consultant - Design & Development** [Integrated Enterprises, Islamabad, Pakistan](#)
- Managing Product Design & Development
  - Standardized Code Implementation
  - ASP.NET Core, Boiler Plate, LINQ, HTML5, JQ, JS, Fluent Validation, PayPal, Stripe, ACH Account, Wallet, Financial Transactions
- 09/16 - 02/17 **Software Development** [Self Employment](#)
- Managing Product Architecture & Design from Inception till Releases
  - Identify Business & Stakeholder Requirements, transform Technical Specs
  - Code Implementations
  - Managing DevOps, CI/CD using VSTS.
- 01/13 - 08/16 **Architect & Tech Lead** [Synergy-IT, Islamabad, Pakistan](#)
- Software & Enterprise Architecture Solutions
  - E-commerce solution with Sitecore & SEFE
  - Running projects in parallel and Assisted in business strategy
- 04/10 - 12/12 **Solution Architect & Staff Engineer** [TEO Pvt. Ltd., Islamabad, Pakistan](#)
- Developed Service Oriented projects in .NET technology
  - Developed Continuous Integration using FxCop, and CruiseControl.Net.
- 02/05 - 04/10 **Software Architect & Technical Lead** [Ciklum Pakistan \(Pvt.\) Ltd., Pakistan](#)
- Worked as Technical lead on Insurance domain called 'European Insurance'.
  - Visited Denmark for Business Requirement Elicitation on 'Dangaard'.
  - Developed a core P2P file sharing engine in C++/STL for 'Eovendo'.
- 10/02 - 02/05 **Senior Software Engineer** [Workplains \(Pvt.\) Ltd., Pakistan](#)
- Designed/developed WORK+ rule-based engine for routing Workflow business processes. VC++, COM/DCOM, STL, ActiveX, VB6, SQL Server & DB2.
- 11/01 - 06/02 **Software Engineer** [Buraq Integrated Solutions, Pakistan](#)
- Worked as developer on Document Management System Modules.
- 03/01 - 11/01 **Software Engineer** [Neo Solutions, Pakistan](#)
- Worked as developer in VC++, COM/DCOM, ATL, and VB.

(References Available Upon Request.)