



# MOHD MAJID AKHTAR

**Phone:** +91 9582470798, +91-9716777919

**E-mail:** akhtarmajid273@gmail.com,  
mohd187209@st.jmi.ac.in

**Website:** <https://mohdmajidakhtar.github.io>

**Last Updated:** 1st December, 2020



## Blockchain PhD Aspirant

**Interests:** Blockchain, Distributed Ledger Technology, Security, Cryptocurrency, Internet of Things, Supply Chain, Healthcare

## PROFILE

I am a post graduate student who has keen interest in Blockchain (Ethereum, Hyperledger), Distributed Ledger Technology (IOTA), Supply Chain solutions and have dedicated experience in Blockchain. I am a research enthusiast and want to excel in the research domain. I did post-graduation (Master's Degree) from Jamia Millia Islamia, New Delhi. I am a fast learner and **looking for fully funded PhD position opportunities in Blockchain and DLT.**

## EDUCATION

MASTER OF TECHNOLOGY  
(COMPUTER ENGINEERING)

**Jamia Millia Islamia, Central University, New Delhi, India (2018-2020)**

**Grade:** 9.76/10 C.G.P.A, Gold Medalist

**Advisor:** Mr. Danish Raza Rizvi (Assistant Professor)

**Thesis:** Investigation in **Blockchain-DLT** Environment and Integration with Internet of Things

BACHELOR OF TECHNOLOGY  
(COMPUTER SCIENCE &  
ENGINEERING)

**Al-Falah University (2014-2018)**

**Grade:** 82.88%, Silver Medalist

**Advisor:** Mr. Mohd Sadim (Assistant Professor)

**Project Title:** In Vitro Fertilization (IVF) Diagnosis Health Care System

## RESEARCH EXPERIENCE

**Enhanced 'MAM Data Stream' by second layer of digital signature scheme.** Investigated extensively in IOTA platform and added ed25519 Digital Signature scheme for verification over shared Masked Authenticated Message (MAM) data streams and implemented IoT secured and verified data channels using MAM and IOTA Tangle.

**Implemented PoC of BAuth-ZKP protocol for secure login.**

Developed a new model of authentication service like OAuth (Open Authentication) using Ethereum Blockchain and added Zero Knowledge Proof mechanism for secure login without sharing actual credentials.

**Developed PoC of new Micro-payment enabled Over-the-Top (OTT) platform**

Developed New Media Streaming platform based on pay-as-you-go and consumption model using IOTA native currency.

## INDUSTRY EXPERIENCE

JUNE 2017-JULY 2017

**MixOrg Consultancy Services Private Limited | Technical Intern**

Successfully build a system for IVF doctors where there was mobile application at patient's side and on the other was a web app for IVF Doctor. This project also served as **Bachelor's project.**

I worked here as **Android Developer** and also made a Web App. I learned **Google Firebase** as a backend service and many other supporting tools in the process. Most importantly, it was first place for me to learn the professional work ethics.

## PUBLICATIONS

MAY 2020

**Akhtar, M. M., & Rizvi, D. R.** "IoT-Chain: Security of things for Pervasive, Sustainable and Efficient Computing using **Blockchain**". In: Energy Web, EAI Transaction (2020), DOI: [10.4108/eai.13-7-2018.164628](https://doi.org/10.4108/eai.13-7-2018.164628)

SEPTEMBER 2020

**Akhtar, M. M., & Rizvi, D. R.** "Traceability and Detection of Counterfeit Medicines in Pharmaceutical Supply Chain Using **Blockchain-Based Architectures**". In: P. S. Ahad Mohd Abdul, Sustainable and Energy Efficient Computing Paradigms for Society. (2020). EAI/Springer Innovations in Communication and Computing, Springer, Cham, DOI: [https://doi.org/10.1007/978-3-030-51070-1\\_1](https://doi.org/10.1007/978-3-030-51070-1_1)

## WORK IN SUBMISSION

NOVEMBER 2020

Ahad, M.A., Tripathi, G., **Akhtar, M. M.**, Paiva, S., Feroz, N., Rizvi, D. R. & Sharma, S.K. "Multifactor Authentication for Smart Cities – A Survey of Needs, Issues, Challenges and the Road Ahead". Proceedings of the IEEE, **Impact Factor: 10.252, (November 2020, Under Review)**

OCTOBER 2020

**Akhtar, M. M.**, Ahad, M. A. Rizvi, D. R. & Chakraborty, C. "Real Time Synchronization and Access Control Mechanism for Consumer Electronics Using **Blockchain & DLT Based Architecture**", Special Issue in IEEE Consumer Electronics Magazine, **Impact Factor: 4.06, (October 2020, Under Review)**

## WORK IN PROGRESS

(OPEN FOR COLLABORATION)

**Akhtar, M. M.**, Rizvi, D. R., Ahad, M. A. & Amjad, M. "Intelligent **Blockchain-IOTA Based Architecture** for Internet of Things and Future M2M", **IEEE Internet of Things Journal, Impact Factor: 9.9 (Targeted Journal)**

**Akhtar, M. M.**, Ahad, M. A. Rizvi, D. R., Tripathi, G. & Chakraborty, C. "Kisaan Chain Network – A **Blockchain Based Supply Chain Platform** for the Indian Agricultural Sector", **Elsevier (Targeted Journal)**

(OPEN FOR COLLABORATION)

**Akhtar, M. M.**, Rizvi, D. R. & Ahad, M. A. "Brief Investigation & Idea behind Cryptocurrencies and Deployment of ERC-20 Tokens on Test Net Ethereum **Blockchain**", **Springer (Targeted Journal)**

**Akhtar, M. M.**, Zaman, S. "**Blockchain** for Multimedia and New Business Model in Smart City", **Springer (Targeted Journal)**

(OPEN FOR COLLABORATION)

**Akhtar, M. M.**, Zaman, S. "**Blockchain** and Consensus Protocols Review and Enhancement"

## SERVICES

REVIEWER

- **Verified Reviewer** at "IEEE Internet of Things Journal", Impact Factor: 9.9

## SEMINARS

Took successive seminars on "**Detailed Investigation & Idea behind Cryptocurrencies and Deployment of Tokens on Ethereum Blockchain**" at Departmental level.

## CERTIFICATIONS

JULY 2018

**Blockchain App Development Certification @ IIT Delhi** | Generation Blockchain Completed 3-Day intensive workshop from June 29 - July 1, 2018 on Blockchain development in partnership with eCells of IIT Delhi, BITS Pilani, DTU and IIIT Delhi.

JULY 2019

"**Solidity Smart Contracts: Build DApps in Ethereum**" from Udemy online course. Credential ID: UC-2GJA6H89

AUGUST 2019

"**Blockchain: Foundation and Use Cases**" by ConsenSys Academy". Credential ID: DFRBL4G4Q85E

OCTOBER 2019

"**Blockchain Programming with Hyperledger Composer and Fabric**" | We2Blocks (Udemy), Credential ID: UC-L46PY443

# HONORS AND AWARDS

MARCH 2017

**Best Upcoming Entrepreneur** | Technia Institute of Advanced Studies  
Received '**Best Upcoming Entrepreneur**' recognition in the Inter University "Business Plan Competition".

APRIL 2017

**Best Power Point Presentator** | Al-Falah University  
Received **1st Prize** for the 'PowerPoint Presentation' on the Theme 'Sustainable Earth' on the eve of Earth Day on 22nd April, 2017 which was sponsored by Ministry of Earth Sciences, Govt. of India.

OCTOBER 2015

**Attended Panel Discussion on "Reimagining the Future"** | PHD Chamber of Commerce and Industry  
Panel Discussion on "Reimagining the Future" with **US Ambassador Mr. Richard Verma** and **Mr. Mitch Daniels**, Former Governor of Indiana and President of **Purdue University** at PHD House, New Delhi.

MARCH 2019

**Graduate Aptitude Test in Engineering (G.A.T.E.) Qualified**

MARCH 2019

**Football Team Captain & Midfielder**, Faculty of Engineering and Technology  
**Winner** at Inter-Faculty Football Tournament (M), JMI, 2019  
Runner-up at Intra-Faculty Football Tournament, JMI, 2019

2014-2020

**Attended workshops** on **Blockchain**, Ethical Hacking, CCNA, **IOTA**, **TEDxJMI**, **oneM2M Standardization** Collaboration for IOT by C-DOT Campus, Python Workshop by Developers Nation & RedInno.

## REFERENCES

PRIMARY SUPERVISOR

**Mr. Danish Raza Rizvi**  
Assistant Professor, Department of Computer Engineering  
Jamia Millia Islamia, New Delhi, India  
drizvi@jmi.ac.in

JOINT SUPERVISOR

**Dr. Mohd Abdul Ahad**  
Assistant Professor, Department of Computer Science and Engineering  
Jamia Hamdard, New Delhi, India  
itsmeahad@ieee.org, itsmeahad@gmail.com

JOINT SUPERVISOR

**Dr. Tanvir Ahmad**  
Head and Professor, Department of Computer Engineering  
Jamia Millia Islamia, New Delhi, India  
tahmad2@jmi.ac.in

## PERSONAL INFORMATION

DATE OF BIRTH

**30th August, 1996**

MARITAL STATUS

**Single**

NATIONALITY

**Indian**

RESIDENTIAL ADDRESS

**B-117, Jamia Enclave, Near Tikona Park, Jamia Nagar, New Delhi-110025, India**

LANGUAGES KNOWN

**English, Hindi**

I hereby declare that all the above information is correct and accurate. I solemnly declare that all the information furnished in this document is free of errors to the best of my knowledge. I hereby declare that all the information contained in this resume is in accordance with facts or truths to my knowledge.

DATE: 01/12/2020

(MOHD MAJID AKHTAR)