Curriculum Vitae

Dr. Asif Umer

PROFILE

"A dedicated researcher in IoT, Cloud, and Fog Computing, with expertise in task scheduling, fault tolerance, and resource allocation. Passionate about developing innovative solutions and mentoring future professionals in advanced computing technologies."

✉ asifumer@hu.edu.pk

📍 Mansehra, Pakistan

📞 +92-3429314692

LANGUAGES

English :   Professional
Urdu :   Professional
Pashto: Professional

SOCIAL MEDIA

in https://www.linked

🐦 @Asifumer1990

WORK EXPERIENCE

28/12/2021
Till date
(Mansehra-Pakistan)

Hazara University, Mansehra, Pakistan
Lecturer CS and IT (BPS-18), Full Time Regular
Tasks:
- Taught graduate and undergraduate courses in Computer Science.
- Supervised multiple research projects, some leading to publications.
- Coordinated departmental projects to improve research initiatives.

01/05/2020
27/12/2021
(Peshawar-Pakistan)

KPK Police
Computer Operator (BPS-16), Full Time Regular
Tasks:
- Managing and writing up the office letters
- Manage central database
- Preparing and giving presentations

27/04/2017
26/04/2020
(Mansehra-Pakistan)

Hazara University, Mansehra, Pakistan
Lecturer Computer Science and IT, Contract
Tasks:
- Taught graduate and undergraduate courses in Computer Science.
- Supervised multiple research projects, some leading to publications.
- Coordinated departmental projects to improve research initiatives.

27/08/2016
27/07/2017
(Abbottabad-Pakistan)

COMSATS University Islamabad, Abbottabad, Pakistan
Lecturer Computer Science, Contract
Tasks:
- Taught graduate and undergraduate courses in Computer Science.
- Supervised multiple research projects, some leading to publications.
- Coordinated departmental projects to improve research initiatives.

1/05/2013
2/04/2014
(Islamabad-Pakistan)

MAG & ASSOCIATES Islamabad, Pakistan
Junior Developer, Contract
Tasks:
- Web based application development using JavaScript.

EDUCATION

Degree	Institution	CGPA/Marks	Year
PhD Computer Science	**Hazara University, Mansehra, KPK, Pakistan**	**3.9/4**	**November 2024**
MS Computer Science	COMSATS Institute of Information Technology, Abbottabad Campus, Pakistan	3.46/4	August 2016
MCS (Master of Computer Science)	University of Science and Technology, Bannu, Pakistan	83%	July 2013
B.Sc (Computer Science)	University of Science and Technology, Bannu, Pakistan	60%	September 2010
F.Sc (Pre-Engineering)	Govt High Secondary School Nadir Bodin Khel, Bannu	67%	April 2008
SSC (Science)	Govt High School Kotka Habibullah, Bannu	65%	April 2006

PUBLICATIONS

1-> PUBLICATION LIST AS FIRST AUTHOR

S. No	Authors, Paper Title, Journal Name	Year
1	**Asif Umer,** Mushtaq Ali, Ali Daud, Lal Hussain, Amal Bukhari, and Ali Imran Jehangiri. "**Fault tolerant & priority basis task offloading and scheduling model for IoT logistics.**" *Alexandria Engineering Journal 110 (2025): 400-419.* https://doi.org/10.1016/j.aej.2024.10.018 **(Imact Factor 6.2, Q1)**	**2025**
2	**Asif Umer**, Mushtaq Ali, Ali Imran Jehangiri, Muhammad Bilal, and Junaid Shuja. "**Multi-Objective Task-Aware Offloading and Scheduling Framework for Internet of Things Logistics**" *Sensors* 24 (2024), no. 8: 2381. https://doi.org/10.3390/s24082381 **(Imact Factor 3.8, Q1)**	**2024**
3	**Asif Umer,** Babar Nazir, & Zulfiqar Ahmad**. Adaptive market-oriented combinatorial double auction resource allocation model in cloud computing.** *The Journal of Supercomputing* (2021). https://doi.org/10.1007/s11227-021-03918-x **(Imact Factor 2.1, Q2)**	**2021**

2-> PUBLICATION LIST AS CO-AUTHOR

S. No	Authors, Paper Title, Journal Name	Year
4	Adnan, Muhammad, Jawaid Iqbal, Abdul Waheed, Noor Ul Amin, Mahdi Zareei, Shidrokh Goudarzi, and **Asif Umer**. "**On the Design of Efficient Hierarchic Architecture for Software Defined Vehicular Networks.**" *Sensors* 21, no. 4 (2021): 1400. **https://doi.org/10.3390/s21041400** **(Imact Factor 3.8, Q1)**	**Published 2021**
5	Ahmad, Zulfiqar, Babar Nazir, and **Asif Umer**. "**A fault-tolerant workflow management system with Quality-of-Service-aware scheduling for scientific workflows in cloud computing**." *International Journal of Communication Systems* 34, no. 1 (2021): e4649. **https://doi.org/10.3390/s21113902** **(Imact Factor 2.2, Q2)**	**Published 2021**
6	Adnan, Muhammad; Iqbal, Jawaid; Waheed, Abdul; Amin, Noor U.; Zareei, Mahdi; Umer, Asif; Mohamed, Ehab M. 2021. "**Towards the Design of Efficient and Secure Architecture for Software-Defined Vehicular Networks**" *Sensors* 21, no. 11: 3902. https://doi.org/10.3390/s21113902 **(Imact Factor 3.8, Q1)**	**Published 2021**
7	Ullah, Zakir, Asif Umer, Mahdi Zaree, Jamil Ahmad, Faisal Alanazi, Noor Ul Amin, Arif Iqbal Umar, Ali Imran Jehangiri, and Muhammad Adnan. (2021). **Negotiation Based Combinatorial Double Auction Mechanism in Cloud Computing.** *CMC-Computers, Materials & Continua*, 69(2), 2123–2140.	**Published 2021**

	https://doi.org/10.32604/cmc.2021.015445 **(Imact Factor 2.9, Q2)**	
8	Syed, Sidra A., Munaf Rashid, Samreen Hussain, Fahad Azim, Hira Zahid, Asif Umer, Abdul Waheed, Mahdi Zareei, and Cesar Vargas-Rosales. 2022. "**QoS Aware and Fault Tolerance Based Software-Defined Vehicular Networks Using Cloud-Fog Computing**" *Sensors* 22, no. 1: 401. **https://doi.org/10.3390/s22010401** **(Imact Factor 3.8, Q1)**	**Published 2022**
9	Muhammad Khan, Ali Imran Jehangiri, Zulfiqar Ahmad, Mohammed Alaa Ala'anzy, Asif Umer "**An exploration to graphics processing unit spot price prediction.**" *Cluster Computing*-3499-3515-2022 **https://doi.org/10.1007/s10586-022-03581-8 (Imact Factor 3.5, Q1)**	**Published 2022**
10	Hira Zahid, Sidra Abid Syed, Munaf Rashid, Samreen Hussain, Asif Umer, Abdul Waheed, Shahzad Nasim, Mahdi Zareei, Nafees Mansoor "**A Computer Vision-Based System for Recognition and Classification of Urdu Sign Language Dataset for Differently Abled People Using Artificial Intelligence**" *Mobile Information Systems-2023* **https://doi.org/10.1155/2023/1060135** **(Imact Factor 1.01, Q3)**	**Published 2023**
11	Ahmad, Imtiaz, Muhammad Adnan, Noor ul Amin, Asif Umer, Adnan Khurshid, Khursheed Aurangzeb, and Muhammad Gulistan. "**Adaptive and Priority-Based Data Aggregation and Scheduling Model for Wireless Sensor Network**." *Knowledge-Based Systems 303* (2024): 112393. **https://doi.org/10.1016/j.knosys.2024.112393** **(Imact Factor 7.2, Q1)**	**Published 2024**

TECHNICAL SKILLS

S. No	Skill Category	Skill Name
1	**Programming Languages**	Java, C++, JavaScript, PHP
2	**Technical Tools**	Eclipse, Latex, MATLAB, Dev++, Dream viewer and Netbean
3	**Databases**	SQL Server, MS Access 2013, Oracle, and MySQL Workbench
4	**Operating systems**	Windows XP / Windows 7,8 and 10
5	**Software Packages**	MS-Office 2013, Adobe photoshoot, Latex, WampServer, Workday
6	**Simulation Tools**	CloudSim, iFogSim2, OMNeT++

RESEARCH INTEREST

- Internet of Things (IoT)
- Cloud & Fog Computing
- Task Scheduling & Optimization
- Fault Tolerance in Distributed Systems
- AI & Machine Learning Applications in IoT
- Wireless Sensor Networks

PROFESSIONAL MEMBERSHIPS & ACHIEVEMENTS

- Organizer of FIT-14 & FIT-15 (International Conference on Frontiers of Information Technology).
- Supervised students in developing the Manshera Police website for KPK Police, District Manshera (received Commendation Certificate).
- One-day training in digital media marketing.
- Certificate of ParticipationTech valley conference 2019
- Certification of Appreciation For organizing the university cluster conference on climate change education in Pakistan
- Certification of Appreciation Two day's training of presiding officers & seniors assistant presiding officers generals election 2018 Pakistan
- HEC Scholar

OVERVIEW OF COURSES TAUGHT

Throughout multiple semesters, I have taught a diverse range of courses in Computer Science and Software Engineering, focusing on fundamental and advanced concepts in programming, data structures, algorithms, databases, and discrete mathematics.

- **Core Programming Courses:** Covered Programming Fundamentals C language, Object-Oriented Programming (OOP) (C++ & Java), and Modern Programming Languages, equipping students with essential coding skills in Java, C++, and scripting languages.
- **Data Structures & Algorithms:** Delivered courses on Data Structures and Algorithms, emphasizing efficient data manipulation, searching, sorting, and algorithmic problem-solving.
- **Mathematical Foundations:** Taught Discrete Mathematics and Discrete Structures, providing students with a strong theoretical background in logic, sets, graphs, and combinatorial techniques.
- **Database Systems:** Conducted Introduction to Database Systems, covering SQL, relational databases, and normalization for efficient data management.
- **Software Engineering & Project Management:** Introduced students to Software Project Management, focusing on SDLC, Agile methodologies, and risk management in real-world software development.
- **Cloud Computing:** Basics of cloud computing, distributed computing and their applications.
- **Internet of Things (IoT):** IoT architecture, devices, arduino programming.

My teaching approach blended theoretical knowledge with hands-on practical applications, ensuring students developed problem-solving abilities and industry-relevant technical expertise

REFERENCES

Dr. Javed Ali Khan,	Dr. Noor ul Amin
Senior Lecturer, Computer Science, University of Hertfordshire, The United Kingdom. Email: j.a.khan@herts.ac.uk	Associate Professor, Department of CS & IT, Hazara University, Mansehra, KPK, Pakistan. Email: namin@hu.edu.pk