

Dr. Mohammad Abu Kausar

Associate Professor, College Academic Advising Officer

Department of Information Systems.

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Time at UoN: Since 2016

Marital Status: Married.

Dr. Mohammad Abu Kausar embarked on his academic odyssey at G. B. Pant University of Agriculture & Technology in Pantnagar, India, where he earned his Master's degree. Building upon this foundation, he further enriched his expertise by completing an MBA (IT) from Symbiosis, Pune, India, and attaining a Ph.D. from Jaipur National University, India.

Currently serving as the Associate Professor of the Department of Information Systems and holding the vital role of College Academic Advising Officer and Media Officer, Dr. Mohammad Abu Kausar brings a wealth of experience and dedication to the academic arena. His journey at the University of Nizwa began in 2016 when he joined the Department of Economics, Management, and Information Systems, leaving an indelible mark on the institution.

Before assuming his current esteemed position, Dr. Mohammad Abu Kausar demonstrated versatility by working as both an Assistant Professor and a Software Engineer. This dual role showcases his comprehensive understanding of academia and practical applications in the realm of Information Systems. Dr. Mohammad Abu Kausar`s research pursuits delve into the realms of Information Retrieval, Web applications, Programming Languages, and Databases. His scholarly endeavors contribute significantly to the ever-evolving landscape of these domains.

Beyond his academic endeavors, Dr. Mohammad Abu Kausar actively participates in numerous

professional associations, underscoring his commitment to staying at the forefront of technological advancements. His affiliations include prestigious organizations such as the Computer Society of India (CSI), IEEE, International Association of Engineers (IAENG), The World Association of Technology Teachers (WATT), Computer Science Teachers Association (CSTA), The Institute of Computer Science, Social Informatics and Telecommunication Engineering (ICST), International Society on Multiple Criteria Decision Making (MCDM), and Universal Association of Computer and Electronics Engineers (UACEE).

Scientific IDs:







Academic Qualifications

Ph.D, Jaipur National University, 2016

Master of Computer Science, G. B. Pant University of Agriculture & Technology, Pantnagar, India, 2006

MBA (IT), Symbiosis, Pune, India

Teaching Activities

DATABASE MANAGEMENT SYSTEMS, This course describes the advantages and the significance of Database Management System. Topics include Introduction to file processing and Database Management Systems (DBMSs), Relational Databases, Normalization, SQL, Entity-Relationship model, theory of Database Design, Physical Database Design, DBMS Technologies, the Client/Server Database Environment and the Internet Database Environment.

WEB DESIGN AND DEVELOPMENT, This course focuses on one of the most important advanced areas of Web development: This course covers techniques and tools for design and development of web pages using ASP.NET, C# and Database which allow developers to Develop Dynamic website using multi-tier architecture.

DATABASE AND DYNAMIC WEB DESIGN, This course focuses on one of the most important

advanced areas of Web development with Database: This course covers techniques and tools for design and development of dynamic web pages using ASP.NET, C#, ADO.NET, AJAX, JQuery etc. AJAX is used for partial post back of web pages which makes web application more interactive. This course allows users to Develop Dynamic web applications using multi-tier architecture with Database.

GRADUATION PROJECT, The students of Information Systems major must choose this Final Year Project and it is course to be completed in one semester and it must demonstrate individual student`s academic knowledge and abilities learnt during their undergraduate courses. They will work on a self-defined project supervised by a faculty member. The students will be trained in software development process to perform at the beginning of their professional career. They will involve in developing computer problems solutions, analysis, and synthesis. Also, students will improve their communication skills through the presentations and preparing final documentation report on their realized work.

INTERNET TECHNOLOGY, The course focuses on the general structure of the Internet and the different component that constitute its building blocks. It also covers the most important Internet Service, which provides the underlying structure of today's Web site and Client-side scripting language that enables Website developers to greatly enhance the end user's experience.

FUNDAMENTALS OF INFORMATION SYSTEM, This course introduces the fundamental concepts of Information Systems which covers system components and relationships, cost/value and quality of information, application systems versus system software, database features, functions, and architecture, system development life cycle, characteristics of IS career paths, information security, crimes and ethics.

WEP APPLICATIONS, This course is framed to bestow students' knowledge to program using the web programming language PHP as a server side language. It goes over the syntax and usage of the language. It focuses on the general structure of the Internet and different components that constitutes to building blocks using PHP language. It also covers the most important Internet Services. Besides that, it covers the dynamic web applications and how to use HTML forms inside the PHP code, how to use SQL and connecting the database using PHP language. This course will enhance their knowledge in the website development and enhance their experience in designing dynamic websites.

E-Commerce, This course is about conducting commerce online or via electronic means. The course explores different definitions and meanings of E-Commerce and related terminology, the foundations on which E-Commerce and E-Business are built, and examine businesses that have built on the technology foundation. The course also explores the impact of E-Commerce on economics and management thinking and introduces different

security and political and legal issues related to E-Commerce and E-Business.

Special Problems, The students learn by readings and discussions on materials relevant to the Information Systems and must prepare a final report. This course emphasizes on important current issues in IS. However, the primary purpose of this course is to develop each student's ability to think scientifically and to clearly present those thoughts. The students will be required to develop their own research report which must contain the title, proposed work to be done, execution of the work, presenting the results and findings in the form of well written report.

Problem Solving and Programming, This course introduces the students to think creatively in solving Problems using Programming. This course focuses on providing fundamental knowledge in Problem solving and Programming principles. The topics include Program structure, Language syntax, Control structures and Statements, Scope of Variables, Data types, Operators, Expressions, Arrays, Functions and Storage classes. The mathematical and scientific problems will be solved using programming practices.

Software Project Management, The course Project Management provides IS specialists with tools and skills necessary to manage projects with associated resources. This course will focus on Information Systems (IS) projects. These are among the most popular types of projects in organizations because IS an integral part of almost every business process. The objectives of this course are to understand fundamental concepts of Project Management, to explore Project Management techniques and to learn from real-world Project Management case studies.

Object Oriented Programming, This course introduces computer programming using the C++ programming language with Object-oriented programming principles. It mainly focuses on the development of Object - Oriented Programming Concepts for the intermediate programming skills. This also supports the development of C++ skills by giving the concept and practice of C++ Applications using Microsoft Visual C++.

Research Activities

- Research Interests

Big Data

Database

Web Technology

Sentiment Analysis

Machine Learning

Artificial Intelligence

- Conference Presentations

Web accessibility challenges in Delhi NCR region university websites: An in-depth analysis using machine learning, 1st International Conference on Artificial Intelligence and Information Technologies, Uzbekistan, 03/11/2023

Implementation of Crawler on .NET Technology, National Conference on Emerging Trends in Engineering & Sciences, Gurukul Kangri University, Haridwar, Uttarakhand, India, 09/11/2013

Maintaining The Repository of Search Engine Freshness Using Mobile Crawler, IEEE International Conference on Microelectronics, Communication and Renewable Energy, Amal Jyothi College of Engineering, Kanjirappally, Kerela, India, 04/06/2013

Parallel Web Crawler based on Mobile Agent, 2nd National Conference on Recent Advances in Technology and Engineering, Mangalayatan University, Aligarh, India, 15/03/2013

Parallel Mobile Crawler Implementation Using Aglets, International Conference on Emerging Trends and Developments in Science, Management and Technology, Raj Kumar Goel Institute Of Technology, Ghaziabad, UP, India, 11/03/2013

Software Testing Effort Allocation Using Genetic Algorithm, National Conference on Progress in Electronics & Allied Sciences, Gurukul Kangri University, Haridwar, Uttarakhand, India, 03/11/2012

- Conference Attendance

8-week online FDP (3-week equivalent- 128 hours of active engagement) on Courseware creation using Moodle for Outcome based Education, Integral University, Lucknow, 05/01/2020

Oracle Academy Faculty Day, Higher College of Technology, Al-Khuwair, Sultanate of Oman, 21/11/2019

Conference on Economics, Business and Information System Trends, University of Nizwa, Nizwa, Sultanate of Oman, 17/04/2019

Current Research Trends in CLOUD COMPUTING & BIG DATA, Jaipur National University, Jaipur, Rajasthan, India, 06/02/2015

National Conference on Emerging Trends in Engineering & Sciences, Gurukul Kangri University, Haridwar, Uttarakhand, India, 09/11/2013

Microsoft Conference on Application testing using Visual Studio organized, Delhi,

04/09/2013

Microsoft Dev Camp on Windows 8 Platform, .NET, Delhi, 29/08/2013

IEEE International Conference on Microelectronics, Communication and Renewable Energy, Amal Jyothi College of Engineering, Kanjirappally, Kerala, India., 04/06/2013

Virtual TechDays Conference on Web Application Development/.net framework, Cloud Computing, Windows Azure, Delhi, 22/03/2013

National Conference on 2nd National Conference on Recent Advances in Technology and Engineering, Mangalayatan University, Aligarh, India, 15/03/2013

International Conference on Emerging Trends and Developments in Science, Management and Technology, Raj Kumar Goel Institute Of Technology, Ghaziabad, UP, India, 11/03/2013

National Conference on E-WASTE SUSTAINABILITY: NEEDS AND SOLUTIONS FOR ITS MANAGEMENT, University of Delhi, New Delhi, India, 07/03/2013

National Conference on Progress in Electronics & Allied Sciences, Gurukul Kangri University, Haridwar, Uttarakhand, India, 03/11/2012

one week workshop on scientific computing: Theory and practices, Gurukul Kangri University, Haridwar, Uttarakhand, India, 08/10/2012

two days Virtual TechDays on Web Application Development/.net framework, Delhi, 18/02/2009

- Publications

Article:

- 1. 2025 Explainable Al for mango leaf disease detection bridging the gap between model accuracy and farmers usability
- 2. 2025 <u>Digital Twin-Enabled Anomaly Detection for Industrial IoT using Explainable Al</u>
- 3. 2025 <u>Intelligent Software Testing Framework: Integrating Genetic Algorithms with Reliability Growth Models</u>
- 4. 2025 Intelligent Web Crawlers with Federated Learning for Search Engine Freshness
- 5. 2025 <u>ACCESSIBILITY GAPS IN OMANI HOSPITAL WEBSITES: A WCAG 2.1 COMPLIANCE STUDY, MOHAMMAD ABU KAUSAR</u>
- 6. 2024 Web accessibility challenges in Delhi NCR region university websites: An in-depth analysis using machine learning
- 7. 2024 <u>Sentiment classification based on machine learning approaches in flipkart product reviews</u>

- 8. 2024 Koha System Performance Tuning: A Case Study
- 9. 2023 <u>Website Assessment and Feature Metrics of University`s Website Accessibility: An Evaluation of 15 Top-Ranked Universities of India</u>, Mohammad Abu Kausar
- 10. 2023 <u>Sentiment Classification based on Machine Learning Approaches in Amazon Product Reviews</u>, Mohammad Abu Kausar, Sallam Osman Fageer, Arockiasamy Soosaimanickam
- 11. 2023 MBA: Market Basket Analysis Using Frequent Pattern Mining Techniques
- 12. 2022 <u>A Study of Performance and Comparison of NoSQL Databases: MongoDB, Cassandra, and Redis Using YCSB</u>
- 13. 2022 Lie Detection Technique using Video from the Ratio of Change in the Appearance
- 14. 2022 Career Counseling Model for Omani High School Students using Fuzzy Logic
- 15. 2021 Public sentiment analysis on Twitter Data during COVID-19 Outbreak
- 16. 2020 SQL Versus NoSQL Databases to Assess their Appropriateness for Big Data Application
- 17. 2019 SQL Injection Detection and Prevention Techniques in ASP.NET Web Application
- 18. 2019 Suitability Of Influxdb Database For IoT Applications
- 19. 2018 An Effective Technique for Detection and Prevention of SQLIA by utilizing CHECKSUM Based String Matching
- 20. 2018 BigData Analytics Techniques to Obtain Valuable Knowledge
- 21. 2015 Md. Abu Kausar, V. S. Dhaka and Sanjeev Kumar Singh "A novel web page change detection approach using Sql Server", International Journal of Modern Education and Computer Science (IJMECS), Hong Kong, Volume 7, Issue 9, pp. 36-43, September 2015
- 22. 2015 <u>Design of Web Crawler for the Client-Server Technology</u>
- 23. 2014 Md. Abu Kausar, V. S. Dhaka and Sanjeev Kumar Singh "Implementation of Parallel Web Crawler through .NET technology", International Journal of Modern Education and Computer Science (IJMECS), Hong Kong, Volume 6, Issue 8, pp. 59-65, August 2014
- 24. 2013 Md. Abu Kausar, V S Dhaka and Sanjeev Kumar Singh. "Web Crawler: A Review." International Journal of Computer Applications 63(2):31-36, February 2013. Published by Foundation of Computer Science, New York, USA
- 25. 2013 Md. Abu Kausar, Md. Nasar and Sanjeev Kumar Singh "Information Retrieval using Soft Computing: An Overview", International Journal of Scientific and Engineering Research (IJSER), Houston, USA, Volume 4, Issue 4, pp. 388-395, April 2013

- 26. 2013 Md. Abu Kausar, Md. Nasar and Sanjeev Kumar Singh "Application of Soft Computing In Information Retrieval A Review of Literature", International Journal of Computer Science Research and Application (IJCSRA), USA, Volume 3, Issue 3, pp. 10-17, September 2013
- 27. 2013 Md. Abu Kausar, Md. Nasar and Sanjeev Kumar Singh "Maintaining The Repository of Search Engine Freshness Using Mobile Crawler", IEEE International Conference on Microelectronics, Communication & Renewablw Energy (AICERA/ICMiCR), Kanjirappally, India, IEEE Explore
- 28. 2013 Md. Abu Kausar, V. S. Dhaka and Sanjeev Kumar Singh "Web Crawler based on Mobile Agent and Java Aglets", International Journal of Information Technology and Computer Science (IJITCS), Hong Kong, vol. 5, no.10, pp.85-91, September 2013
- 29. 2013 Md. Abu Kausar, Md. Nasar and Sanjeev Kumar Singh "A Detailed Study on Information Retrieval using Genetic Algorithm", Journal of Industrial and Intelligent Information (JIII), SAN JOSE, CA, USA, Volume 1, Issue 3, pp. 122-127, September 2013

Book:

1. 2014 INTRODUCTION TO ASP.NET, Mohammad Abu Kausar

Book Section:

- 1. 2026 <u>Collaborative Health Intelligence: Federated Learning as the Foundation of Future Medical Care</u>
- 2. 2023 <u>Blockchain technology: Emerging trends and applications</u>, Kausar, M.A. , Soosaimanickam, A.

Conference or Workshop:

1. 2025 <u>Detection and Prevention of Cell Congestion in LTE Networks using Machine</u> <u>Learning Techniques</u>

Faculty Administrative Experience

2024 - Present: College Examination Officer - College of Economics, Management and Information Systems

2021 - Present: College Media Officer

2021 - Present: College Web Coordinator

2021 - Present: College Academic Advising Officer

2019 - Present: Program Coordinator - Department of Information Systems

Community Services

Reviewer/Editorial of several academic journals

Consultancy Activities

Academic Advisor, College of Economics, Management & Information Systems, University of nizwa, Nizwa, 2016

Internal Supervisor, Master Program, CEMIS, University of Nizwa, Nizwa, 2017

Membership in Professional Bodies

2014-Present: International Association of Computer Science and Information Technology (IACSIT), Singapore

2014-Present: Member of Computer Society of India (CSI), India

2013-Present: International Association of Engineers and Scientists (IAEST)

2013-Present: Computer Science Teachers Association (CSTA), U.S.A

2013-Present: International Association of Engineers (IAENG), Hong Kong

2013-Present: Science and Engineering Institute (SCIEI), U.S.A

Award and Recognitions

2025 Honored as a recipient of the prestigious **Best Academician Award** presented by the 360 Research Foundation, India

2024 Awarded by the University of Nizwa administration for my efforts and contributions in the field of **Academic and Educational Excellence** during the AY 2023-2024, at the Chancellor`s Annual Meeting.

2024 Promoted as Associate Professor

2018 Best Young Researcher

2011 Awarded UGC Senior Research Fellowship (SRF) during Ph.D. Programme.

2008 Microsoft certified Professional (MCP) and Microsoft certified Technology Specialist (MCTS) in .Net Framework 2.0 Web Application

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