# Prof. (Dr.) UMESH KUMAR SINGH

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Designation		Professor & Dean		
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# **Educational Qualifications**

Educational Quantications					
Degree	Institution	Year			
Ph.D. Computer Science	Devi Ahilya University, Indore	2006			
MCA	Barkatullah University, Bhopal	1994			
B.Sc.	Vikram University, Ujjain	1989			
PGDCSA	Vikram University, Ujjain	1991			

# **Career Profile**

2023-till date, **Dean**, Faculty of Engineering Science, Vikram University, Ujjain

2019 –2023, **Director**, Institute of Computer Science, Vikram Universey, Ujjain

2012 -till date: **Professor**, Institute of Computer Science, Vikram University, Ujjain.

2022-2023, Director, Internal Quality Assessment Cell(IQAC), Vikram University, Ujjain

2021- till date, **Director**, University Incubation Centre, Vikram University, Ujjain.

2014 – 2020: **Director**, School of Engineering & Technology, Vikrm University, Ujjain

2010 – 2014: **Director**, Institute of Computer Science, Vikram University, Ujjain.

2011- 2011: **Founder Director**, School of Engineering & Technology, Vikram University, Ujjain.

2007 –2012: Associate Professor, Institute of Computer Science, Vikram University, Ujjain.

2004-2006: **Director**, Mahakal Institute of Management (MIM), Ujjain

2006-2006: **Dean Academics**, Mahakal Institute of Technology (MIT), Ujjain

2003-2006: **Dean Administration**, Mahakal Institute of Technology (MIT), Ujjain

2002 – 2006: **Principal**, Mahakal Institute of Computer Sciences, Ujjain

- 2002 2006: **Professor**, Mahakal Institute of Computer Sciences, Ujjain
- 1998 2002: **Director**, Institute of Computer Science, Vikram University, Ujjain.
- 1996 2002: Lecturer, Institute of Computer Science, Vikram University, Ujjain.
- 1995 1996: Engineer (E & T), CMC Limited (Govt. of India Enterprise), New Delhi

# **Administrative Assignments**

- January 2019-2023, Director, Institute of Computer Science, Vikram University, Ujjain
- June 2014 2020: **Director**, School of Engineering & Technology, VikrmUniversity, Ujjain
- January 2010 2014: **Director**, Institute of Computer Science, Vikram University, Ujjain.
- 2018-2022: Expert Member, Scrutiny Committee, AICTE, New Delhi
- 2015- 2018: **Director**, School of Distance Education, Vikram University, Ujjain.
- 2014-2020: Chairman, Board of Studies of Engineering Sciences, Vikram Uni., Ujjain
- 2013- till date: Chairman, Board of Studies of Computer Science, Vikram Uni., Ujjain
- 2012- till date: Chairman, Departmental Research Committee, Vikram University, Ujjain
- 2011- 2011: **Founder Director**, School of Engineering & Technology, Vikram University, Ujjain.
- 2011: **Member**, E-Goverance Committee, Vikram University, Ujjain
- 2011: **Member**, Advisory Committee of SoET, Vikram University, Ujjain
- 2011: **Superintendent**, Semester Examination -2011, Vikram University, Ujjain.
- 2011: **Member** of BOS, Comp.Sc., Many Universities of MP
- 2010 : **Deputy Registrar I/c (Exam.),** Vikram University, Ujjain
- 2010 : **Director I/c, College Development Council,** Vikram University, Ujjain
- 2010- 2013: Chairman, Board of Studies of Computer Science, Vikram University, Ujjain
- 2010: **Member,** Governing Body of MIT, Mandsour
- 2010-2021: Member, Selection/Interview Committee, Many Universities
- 2010-2021: Member, Higher Purchase Committee, Vikram University, Ujjain.
- 2010-2022: **Chairman**, Registration Committee in University Convocations
- 2010-2021: Member, Technical Committee, Vikram University, Ujjain
- 2009-2010: Assistant Proctor, Vikram University, Ujjain
- 2004-2006: **Director**, Mahakal Institute of Management (MIM), Ujjain
- 2006-2006: **Dean Academics**, Mahakal Institute of Technology (MIT), Ujjain
- 2003-2006: **Dean Administration**, Mahakal Institute of Technology (MIT), Ujjain
- 2002 2006: **Principal**, Mahakal Institute of Computer Sciences, Ujjain

1998 – 2002: **Director**, Institute of Computer Science, VikramUniversity, Ujjain.

1998-2021: Member, Academic Council, Vikram University, Ujjain.

1998-2021: Expert Member, College Inspection Committee, Vikram University, Ujjain

1996-2021: Member, Result Committee, Vikram University, Ujjain

1996-2021: Member, University Examination Committee, Vikram University, Ujjain

# **Area of Interest/ Specialization**

• Information and Network Security

# **Subjects Taught**

- Data Structures & Algorithm Design
- Data Communication & Computer Networks
- Computer Network Security
- Data Base Management Systems

### **Publication Profile**

### **Research Papers:**

## (A). Journal Papers:

#### International:

- 1. Singh Umesh Kumar & Sharma A., "Cloud Computing Security Framework Based On Shared Responsibility Models," in Cyber-Physical, IoT, and Autonomous Systems in Industry 4.0, CRC Press Taylor & Francis Group, 2022, 39-55, DOI: 10.1201/9781003146711-3.
- 2. Singh Umesh Kumar & Sharma A. "Security and Privacy aspect of Cyber-Physical Systems," in Cyber Physical Systems Concepts and Applications, CRC Press Taylor & Francis Group, 2023, DOI: 10.1201/9781003220664-9.
- 3. Raghuvanshi A., Singh Umesh Kumar, Intrusion Detection Using Machine Learning for Risk Mitigation in IoT-Enabled Smart Irrigation in Smart Farming. Journal of Food Quality, 2022, 1-8. Doi:10.1155/2022/3955514 (SCI Indexed)
- 4. Raghuvanshi, A., Singh, U., & Joshi, C. (2022). A Review of Various Security and Privacy Innovations for IoT Applications in Healthcare. Advanced Healthcare Systems, 43-58. doi: 10.1002/9781119769293.ch4 (Scopus indexed)
- 5. Sharma A. & Singh Umesh Kumar, Deployment model of e-educational cloud for departmental academics automation using open source, HTL, 2021, Vol-27 (5), 2021, ISSN NO: 1006-6748, http://www.gjstx-e.cn/gallery/36-may2021.pdf (Scopus Indexed)
- 6. Sharma A. and Singh Umesh Kumar, Investigation of Cloud Computing security issues & challenges, Atlantis Highlights in Computer Sciences, ISSN: 2589-4900, 2021, 445-453, https://doi.org/10.2991/ahis.k.210913.055 (Springer nature WoS / Scopus Indexed)
- 7. Sharma A. & Singh Umesh Kumar, "Modelling of smart risk assessment approach for cloud

- computing environment using AI & supervised machine learning algorithms," Global Transitions Proceedings, Volume 3, Issue 1, 2022, Pages 243-250, ISSN 2666-285X, https://doi.org/10.1016/j.gltp.2022.03.030 (Springer ScienceDirect)
- 8. Raghuvanshi A., Umesh Kumar Singh et.al., "Internet of Things- Security Vulnerabilities and Countermeasures", ECS Transactions, Vol. 107(1) <a href="https://iopscience.iop.org/article/10.1149/10701.15043ecst">https://iopscience.iop.org/article/10.1149/10701.15043ecst</a>
- 9. Dixit K. & Singh Umesh Kumar, "Attack Taxonomy for Big Data Environment", International Journal of Computer Applications, Volume 185, No.25, July 2023
- 10. Dixit K. & Singh Umesh Kumar, "An Information Security Risk Assessment Framework for Big Data Environment", International Journal of Innovative Science and Research Technology Volume 8, issue 6, June 2023.
- 11. Dixit K. & Singh Umesh Kumar, "Comparative study of Information Security Risk Assessment Methodologies", International Journal of Computer Application, Vol. 185, No.7, May 2023
- 12. Sheikh S. & Singh Umesh Kumar, "Towards Identification Of Vulnerabilities And Their Exploits Using Penetration Testing Tools". International Research Journal of Modernization in Engineering Technology and Science, Vol.05, Issue.1, pp.1792-1799, DOI LINK: 10.56726/IRJMETS33212
- 13. Dixit K. & Singh Umesh Kumar, "Identification of Web Vulnerabilities through IISRA Framework" International Journal of Novel Research and Development (IJNRD), Vol. 8, Issue 5, May 2023.
- 14. Dixit K. & Singh Umesh Kumar, "Identification of Network Vulnerabilities through IISRA Framework", International Journal for Research in Applied Science and Engineering Technology (IJRASET), Vol. 11, Issue 5, May 2023.
- 15. Sheikh S. & Singh Umesh Kumar "An Investigation of Vulnerabilities Discovery and Assessment in Educational Institutions" Iconic Research And Engineering Journals Volume 6 Issue 7 2023 Page 143-150
- 16. Dixit K. & Singh Umesh Kumar, "Qualitative and Quantitative Risk Assessment through IISRA Framework", International Journal for Research in Applied Science and Engineering Technology (IJRASET), Vol. 11, Issue 5, May 2023.
- 17. Sheikh S. & Singh Umesh Kumar Singh, "A Mitigation Plan To Encounter Discovered Vulnerabilities In Educational Web Application", International Journal of Science & Engineering Development Research (www.ijsdr.org), ISSN:2455-2631, Vol.8, Issue 1, page no.1288 1291, January-2023, Available: http://www.ijsdr.org/papers/IJSDR2301207.pdf
- 18. Dixit K. & Singh Umesh Kumar "Threat and Asset Identification through IISRA Methodology" International Journal of Creative Research Thoughts (IJCRT), Vol 11, Issue 4, April 2023.
- 19. Dixit K. & Singh Umesh Kumar, "Attack Taxonomy for Cyber-Physical System", International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 10 Issue I Jan 2022- Available at <a href="https://www.ijraset.com">www.ijraset.com</a>
- 20. Upreti, K., Singh Umesh Kumar et. al., Fuzzy Logic Based Support Vector Regression (SVR) Model for Software Cost Estimation Using Machine Learning, ICT Systems and Sustainability, Lecture Notes in Networks and Systems, Vol 321. Springer, Singapore. <a href="https://doi.org/10.1007/978-981-16-5987-4\_9">https://doi.org/10.1007/978-981-16-5987-4\_9</a>
- 21. Dixit K. & Singh Umesh Kumar, An Information Security Risk Assessment Framework for Cyber-Physical System, International Journal of Computer Applications (0975 8887) Volume 183 No. 53, February 2022
- 22. Dodiya B. & Singh Umesh Kumar, Malicious Traffic analysis using Wireshark by collection of

- Indicators of Compromise. International Journal of Computer Applications 183(53):1-6, February 2022
- 23. Dixit K., Singh Umesh Kumar, Attack Taxonomy for Cyber-Physical System, International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 10 Issue I Jan 2022- Available at <a href="https://www.ijraset.com">www.ijraset.com</a>
- 24. Raghuvanshi A., Singh Umesh Kumar et. al., An Investigation of Various Applications and Related Security Challenges of Internet of Things", Elsevier Materials Today, 2021. <a href="https://doi.org/10.1016/j.matpr.2021.01.821">https://doi.org/10.1016/j.matpr.2021.01.821</a>
- 25. Dodiya B. & Singh Umesh Kumar, Aggregate Analysis of Security Surveys. International Journal of Computer Applications, 183(33):16-22, October 2021
- 26. Dodiya B. & Singh Umesh Kumar, Trend Analysis of the CVE Classes Across CVSS Metrics, International Journal of Computer Applications, 183(33):23-30, October 2021
- 27. Dodiya B. & Singh Umesh Kumar, Towards Categorization of Network Layer Attacks. International Journal of Computer Applications, 183(13):6-11, July 2021.
- 28. Raghuvanshi A., Singh Umesh Kumar et. al., Internet of Things: Taxonomy of Various Attacks", *European Journal of Molecular & Clinical Medicine*, 2020, Volume 7, Issue 10, Pages 3853-3864 (Scopus Indexed)
- 29. Raghuvanshi A. & Singh Umesh Kumar "Internet of Things for smart cities- security issues and challenges", Elsevier Materials Today , December 2020 <a href="https://authors.elsevier.com/a/1cCul7tbNaHdba">https://authors.elsevier.com/a/1cCul7tbNaHdba</a> (Scopus Indexed)
- 30. Raghuvanshi A., Singh Umesh Kumar, Panse P. & Saxena M., "A Taxonomy of Various Building Blocks of Internet of Things", International Journal of Future Generation Communication and Networking Vol. 13, No. 4, (2020), pp. 4397–4404 (Emerging SCI Indexed)
- 31. Raghuvanshi A., Singh Umesh Kumar, Bulla C., Saxena M. & Abadar K., "An Investigation on Detection of Vulnerabilities in Internet of Things", European Journal of Molecular & Clinical Medicine Volume 07, Issue 10, 2020, pp. 3289–3299 (Scopus Indexed)
- 32. Dodiya B. & Singh Umesh Kumar, Identification of Taxonomic Features Through Assessment of Existing Taxonomies for Vulnerability Identification, International Journal of Computer Application (IJCA), ISSN 2250-1797, 174(31). Pp. 14-22.
- 33. Raghuvanshi A., Singh Umesh Kumar, Mohammed S., Alam S., "An Investigation of Various Applications and Related Security Challenges of Internet of Things", Elsevier Materials Today, February 2021 (Scopus Indexed)
- 34. Singh Umesh Kumar & Joshi C., Scalable Approach Towards Discovery of Unknown Vulnerabilities, International Journal of Network Security, Vol.20, No.5, pp. 827-835, Sep. 2018, ISSN 1816-353X (P), ISSN 1816-3548 (O), UGC No 23213, impact factor: 1.68
- 35. Joshi C. & Singh Umesh Kumar, An Enhanced Framework for Identification and Risks Assessment of Zero-Day Vulnerabilities, International Journal of Applied Engineering Research, ISSN 0973-4562,UGC No.64529, Volume 13, Number 12, July 2018, pp. 10861-10870, impact factor: 0.848
- 36. Joshi C. & Singh Umesh Kumar, Testbed for Mitigation of Network Vulnerabilities Enhancing organization's security resilience in an experimental environment, International Journal of Computer Application (IJCA), ISSN 2250-1797, UGC No. 64190, Vol. 8, No. 2, April 2018, pp. 48-62, impact factor: 3.12
- 37. Singh Umesh Kumar & Joshi C., Comparative Study of Information Security Risk Assessment Frameworks, International Journal of Computer Application (IJCA), ISSN 2250-1797, UGC No.

- 64190, Vol. 8, No. 2, April 2018, pp.82-89, impact factor: 3.12
- 38. Joshi C. & Singh Umesh Kumar, Layered Architecture for Security Vulnerabilities Assessment A Cornerstone of Effective Security Planning, International Journal of Creative Research Thoughts, ISSN: 2320-2882, UGC No. 49023, Vol 6, No 2, April 2018, pp. 668-700, impact factor: 5.97
- 39. Joshi C. & Singh Umesh Kumar, Potential Mitigation Strategies for the Common Vulnerabilities for Development of Secure Network, International Journal of Creative Research Thoughts, ISSN: 2320-2882, UGC No. 49023, Vol 6, No 2, April 2018, pp. 896-905, impact factor: 5.97
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- 42. Choukse D. &Singh Umesh Kumar, To Study the Performance of ACM (Access Control Model) to Identify the Security Issues and to resolve the Problem of Assign Authorization to Object Through SSO (Single Sign-On), International Journal of Computer Applications, 179(22), pp.13-18, February 2018
- 43. Choukse D. &Singh Umesh Kumar, To Study the Functionality and Performance of Web Services, International Journal of Computer Applications, 180(18), pp.1-5, February 2018
- 44. Choukse D. & Singh Umesh Kumar, Enterprise Web based File Management A System Architecture and Solution, International Journal of Computer Applications, 179(12), pp. 48-51, January 2018.
- 45. Shahapurkar R. & Singh Umesh Kumar, Effect of Entity Mobility Models on Reactive Protocol in Mobile Ad Hoc Networks, International Journal of Creative Research Thoughts –, 2018, 6(2), 1214-1221, ISSN: 2020-2882
- 46. Shahapurkar R.& Singh Umesh Kumar, Effect of Group Mobility models on Routing Protocols in Manet, International Journal for Research in Applied Science and Engineering Technology, 2018, 6(7), 274-282, ISSN:2321-9653
- 47. Shahapurkar R. & Singh Umesh Kumar, A Conceptual Study of Mobility Models in MANET, International Journal of Creative Research Thoughts, 2018, 6(2), 1116-1123, ISSN: 2320-2882
- 48. Shahapurkar R. & Singh Umesh Kumar, Analysis of Entity and Group Mobility Models with Routing Protocol In Manet, International Journal of Creative Research Thoughts, 2018, 6(2), 1203-1213, ISSN 2320-2882
- 49. Joshi C. & Singh Umesh Kumar, Information security risks management framework A step towards mitigating security risks in university network, Journal of Information Security and Applications, Elsevier, Vol. 35, pp. 128–137, June 2017, impact factor: 1.65.
- 50. Singh Umesh Kumar & Joshi C., Information Security Risk Management Framework for University Computing Environment, International Journal of Network Security, Vol.19, No.5, pp.742-751, Sept. 2017, ISSN 1816-353X (Print), ISSN 1816-3548 (Online), impact factor: 1.68.
- 51. Joshi C. & Singh Umesh Kumar, Information security risks management framework A step towards mitigating security risks in university network, Journal of Information Security and Applications, Elsevier, Vol. 35, pp. 128–137, June 2017, impact factor: 1.65.
- 52. Singh Umesh Kumar & Joshi C., Information Security Risk Management Framework for University Computing Environment, International Journal of Network Security, Vol.19, No.5, pp.742-751, Sept. 2017, ISSN 1816-353X (Print), ISSN 1816-3548 (Online), impact factor: 1.68.
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- 54. Suyash Kumar Singh, Sanjiv Tokekar, Abhishek Raghuvanshi, Umesh Kumar Singh, "Role of SCADA & IoT in Industrial Automation", International Journal of Scientific Research and Development, vol. 5, issue 6, pp. 2149-2151, 2017.
- 55. Singh Umesh Kumar & Joshi C., ZDAR System: Defending Against the Unknown, International Journal of Computer Science and Mobile Computing, Vol.5 Issue.12, December- 2016, pp. 143-149, impact factor: 6.017.
- 56. Singh Umesh Kumar, Gaud N. & Joshi C., "A Framework for Digital Forensic Investigation using Authentication Technique to maintain Evidence Integrity", International Journal of Computer Application (IJCA, 0975 8887), Volume 155, November 2016, ISBN 973-93-80883-35-9.
- 57. Singh Umesh Kumar, Joshi C.& Gaur N., "A Framework for Network Security Risk Level Measurement for Vulnerability Categories", Accepted for Publication in International Journal of Computer Science Application.
- 58. Joshi C. & Singh Umesh Kumar, "Managing Security Risks and Vulnerabilities in University's IT Threats Landscape", Accepted for Publication in International Journal of Computer Science Application.
- 59. Joshi C. & Singh Umesh Kumar, "Analysis of Vulnerability Scanners in Quest of Current Information Security Landscape", International Journal of Computer Application (IJCA, 0975 8887), Volume 146, Issue 2, July 2016, ISBN 973-93-80883-35-9, pp 1-7.
- 60. Joshi C. & Singh Umesh Kumar, "Performance Evaluation of Web Application Security Scanners for More Effective Defense", International Journal of Scientific and Research Publications (IJSRP), Volume 6, Issue 6, June 2016, ISSN 2250-3153, pp 660-667.
- 61. Jaiswal Teena & Singh Umesh Kumar, "A Novel Security Approach for Access Model", International Journal of Computer Application, Vol.138, No.9, 2016, pp 25-30.
- 62. Pandya B., Singh Umesh Kumar & Dixit K., "Impact of known Input Output attacks in Euclidean Distance preserving perturbation for privacy Preserving Data Mining', International Journal of Emerging Research in Management & Technology, Volume 4, Issue 4 ISSN: 2278-9359, pp 110-114
- 63. Pandya B., Singh Umesh Kumar & Dixit K., "A Robust Privacy Preservation by Combination of Additive and Multiplicative Data Perturbation for Privacy Preserving Data Mining", International Journal of Computer Applications (0975 8887), Volume 120, Issue.1, June 2015, ISBN 973-93-80883-35-9, pp 25-28.
- 64. Pandya B., Singh Umesh Kumar & Dixit K., "An Efficient K-Means Clustering by using Combination of Additive and Multiplicative Data Perturbation for Privacy Preserving Data Mining", International Journal of Scientific and Research Publications, Volume 5, Issue 5, May 2015, ISSN 2250-3153, pp 1-4.
- 65. Pandya B., Singh Umesh Kumar & Dixit K., "An Efficient KNN Classification by using Combination of Additive and Multiplicative Data Perturbation for Privacy Preserving Data Mining", International Journal of Engineering Trends and Technology (IJETT) Volume22, Number 7, April 2015, ISSN: 2231-2803, pp 290-295.
- 66. Pandya B., Singh Umesh Kumar & Dixit K., "Impact of known Input Output attack in CAMDP technique for privacy Preserving Data Mining", International Journal of Computer Application (2250-1797) Volume 5, No. 3, April 2015, pp 132-140.
- 67. B.Pandya, U.K. Singh and K. Dixit, "A Comparative Study of Multiplicative Data Perturbation techniques for privacy Preserving Data Mining, International Journal of Advanced Research in Computer Engineering and Technology (IJARCET), 2015, (4), 1387-

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- 72. Laddhani L. &Singh Umesh Kumar "Optimization of Dynamic Source Routing Protocol with Effective Resource Management" International Journal of Computer Application (0975-8887) Volume 128-No.18, Page no. 10-13, October 2015.
- 73. Laddhani L. &Singh Umesh Kumar "Optimization of OLSR Routing Protocol with Effective Resource Management" International Journal of Computer Application (0975-8887) Volume 132-No.17, Page 39-45, December 2015.
- 74. Singh Umesh Kumar, Phuleria K., Sharma S. & Goswami D.N., SCAODV: A Protocol to prevent Black hole Attacks in Mobile Ad-hoc Networks, International Journal of Computer Science and Communication (IJCSC), Volume 6, Issue 2, 2015.
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- 77. Joshi C. & Singh Umesh Kumar, A Novel Approach towards Integration of Semantic Web Mining with Link Analysis to Improve the Effectiveness of the Personalized Web International Journal of Computer Application (IJCA, 0975 8887), Volume 128, Issue 11, October 2015, ISBN 973-93-80883-35-9, pp 1-5.
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- 81. Singh Umesh Kumar, Laddhani L. & Phuleria K., Analysis of MANET Routing Protocols with Effective Resource Management, International Journal of Emerging Technology and Advanced Engineering, 2014, 4(6), 724-729, ISSN 2250-2459.
- 82. Pandya B., Singh Umesh Kumar & Dixit K., Performance of Euclidean Distance Preserving Perturbation for K-nearest Neighbor Classification, International Journal of Computer Applications, 2014, 105(2), 34-36, ISSN: 0975 8887
- 83. Joshi C. & Singh Umesh Kumar, ADMIT- A Five Dimensional Approach towards Standardization of Network and Computer Attack Taxonomies, International Journal of Computer Applications, 2014, 100(5), 30-36, ISSN: 0975 8887
- 84. Pandya B., Singh Umesh Kumar & Dixit K., A Study of Projection based Multiplicative Data Perturbation for Privacy Preserving Data Mining, International Journal of Application or Innovation in Engineering & Management (IJAIEM), 2014, 3(11), 180-182, ISSN: 2319 4847.
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- 86. Pandya B., Singh Umesh Kumar & Dixit K., An Evaluation of Projection Based Multiplicative Data Perturbation for KNN Classification, International Journal of Science and Research (IJSR), 2014,3(12), 681-684, ISSN: 2319-7064
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- 111. Tripathi A. & Singh Umesh Kumar, A Proposal for Common Vulnerability Classification Scheme Based on Analysis of Taxonomic Features in Vulnerability Databases, International Journal of Computer Science and Information Security, 2011, 9(6), 106-111, ISSN: 1947-5500, Impact Factor: 0.423
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- 116. Sukheja D. & Singh Umesh Kumar, Architecture of shared-nothing cluster to fast accessing and ensure the availability of data in distributed database environment, International Journal of Advanced Research in Computer Science, 2011,2(3), 572-575, ISSN 0976 5697, Impact Factor: 0.569
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- 120. Choukse D., Singh Umesh Kumar, Sukheja D., Shahpurkar R., Implementing New Age Authentication Techniques using Open-ID Security Automation, International Journal of Computer Science and Information Security, 2010, 7(2), 15-21, ISSN: 1947-5500, Impact Factor 0.423
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- 134. Singh Umesh Kumar, A.K. Ramani & N.S. Chaudhari, Data Encryption: Securing Data over Intranet, Engineering and Environmental Sciences Journal, Vol 1(1), (2005) 28-31. ISSN 0972-9623
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#### (B). Conference Papers:

#### International:

- 148. Sharma A., Singh Umesh Kumar et. al., A Comparative analysis of security issues & vulnerabilities of leading Cloud Service Providers and in-house University Cloud platform for hosting E-Educational applications, 2021 IEEE Mysore Sub Section International Conference (MysuruCon), 2021, pp. 552-560, doi: 10.1109/MysuruCon52639.2021.9641545. (IEEE, Scopus Indexed)
- 149. Dixit K. & Singh Umesh Kumar "An Integrated Information Security Risk Assessment (IISRA) Framework for Small and Medium sized Organizations" Accepted for publication in 2<sup>nd</sup> international Conference on Data Science and Artificial Intelligence 2023, an Springer Conference (Scopus indexed)
- 150. Sharma A.,Singh Umesh Kumar et. al., An investigation of security risk & taxonomy of Cloud Computing environment, 2<sup>nd</sup> International Conference on Smart Electronics and Communication (ICOSEC), Trichy, India, 2021, pp. 1056-1063, doi: 10.1109/ICOSEC51865.2021.9591954. (IEEE, Scopus Indexed)
- 151. Raghuvanshi A. & Singh Umesh Kumar, "Applications and Future Challenges in Internet of Things for Making India Self-Reliant", Young Scientists' Conference under India International Science Festival (IISF) organized by Ministry of Science and Technology and Ministry of Earth Sciences in association with Vijnana Bharati (VIBHA), 22-25 December 2020.

- 152. Raghuvanshi A., Singh Umesh Kumar & Beuria M., "Applicability of Blockchain towards Mitigation of Distributed Denial of Service Attack in IoT", Accepted in 3<sup>rd</sup> IEEE International Conference on Emerging Smart Computing and Informatics, ESCI-2021, 05-07 March 2021(Will be published in IEEE Explore) (Scopus Indexed)
- 153. Raghuvanshi A. & Singh Umesh Kumar, "Internet of Things in Healthcare -Applications, Issues and Challenges" BITCON 2020 conference, on 20 November 2020 organized by BIT Durg.
- 154. Raghuvanshi A. & Singh Umesh Kumar, "Internet of Things for smart cities- security issues and challenges", AICTE Sponsored International Conference on Advances in Communications, Computing and Embedded Systems, (ISBN 13:978-81-930222-9-0) 18-19 September 2020, Gokaraju Rangaraju Institute of Engineering and Technology, Telangana, India\
- 155. Singh Umesh Kumar & Joshi C., Quantitative Security Risk Evaluation using CVSS Metrics by Estimation of Frequency and Maturity of Exploit, Proceedings of the World Congress on Engineering and Computer Science 2016 Vol I WCECS 2016, San Francisco, USA, October 19-21, 2016, ISBN: 978-988-14047-1-8, ISSN: 2078-0958 (Print), ISSN: 2078-0966 (Online)
- 156. Singh Umesh Kumar, Knowledge Management and Management of Information, Proceedings of 10<sup>th</sup> European Conference on Knowledge Management, Università Degli Studi Di Padova, Vicenza, Italy, September 2-3, 2009
- 157. Sukheja Deepak & Singh Umesh Kumar, Query Processing and Optimization of Parallel Database System in Multi Processor Environments, Proc. of Sixth Asia Modelling Symposium IEEE conference, IEEE Computer Society, Bali, Indonesia May 29-31, 2012, 191-194, ISBN: 978-0-7695-4730-5,DOI 10.1109/AMS.2012.49
- 158. Tripathi, A. & Singh Umesh Kumar, Taxonomic Analysis of Classification Schemes in Vulnerability Databases, Proc. 6<sup>th</sup> International Conference on Computer Sciences and Convergence Information Technology, IEEE Computer Society, Seogwipo, Korea, 29 Nov 01 Dec 2011, 686-691,
- 159. Tripathi, A. & Singh Umesh Kumar, Taxonomic Analysis of Classification Schemes in Vulnerability Databases, Proc. 6<sup>th</sup> International Conference on Computer Sciences and Convergence Information Technology, IEEE Computer Society, Seogwipo, Korea, 29 Nov 01 Dec 2011, 692-697,
- 160. Sukheja D. & Singh Umesh Kumar, Design of Shared nothing cluster architecture for fast accessing and high availability of data in heterogeneous database environment, Proceedings of IEEE- World Congress on Information and Communication Technologies (WCICT), IEEE Computer Society, Mumbai, 11-14 December, 2011, 112-115, Print ISBN: 978-1-4673-0127-5, DOI:10.1109/WICT.2011.6141190
- 161. Tripathi, A. and Singh, U.K., Towards Standardization of Vulnerability Taxonomy, Proc. 2<sup>nd</sup> International Conference on Computer Technology & Development, Cairo, Egypt 2-4 Nov.,

- 2010, IEEE Computer Society, 379-384, E-ISBN: 978-1-4244-8845-2, Print ISBN: 978-1-4244-8844-5, DOI: 10.1109/ICCTD.2010.5645826
- 162. Sukheja D. & Singh Umesh Kumar, Performance evaluation of Global query execution in distributed databases through semantic query optimization technique, Proceeding of ICCA 2010-International Conference on Computer Applications, Pondicherry, India, 24-27 December, 2010, 191-196

#### National:

- 163.Singh Umesh Kumar & B.K. Singh, An Education and Training System on Intranet: A Web Based MIS Application, Proceedings of 6<sup>th</sup> Annual Convention of MP Section of ISTE and National Seminar on MIS in Technical Education, Ujjain Engineering College, Ujjain(MP), (2002) 19-22
- 164.Singh Umesh Kumar, Integrated Mailing System: A Network Based Communication Sytem, Proceedings of Young Scientist Congress, 1997, Organized by G.G.D. University, Bilaspur, sponsored by MAPCOST (Madhya Pradesh Council of Science and Technology. Bhopal.(1997) (Young Scientist Awarded Paper).

### **Patents Published:**

- 1. TRANSPARENT AND USER-FRIENDLY BILLING SYSTEM, METHOD AND PROCESS TOWARDS SMART GOVERNANCE, The Patent Office Journal No. 09/2021 Dated: 26/02/2021, Page No: 9795,
- 2. *METHOD AND SYSTEM FOR PREDICTING A ZERO DAY ATTACK*, The Patent Office Journal No. 13/2021 Dated: 26/03/2021, Page No: 15319,
- 3. VEHICULAR COMPONENTS HEALTH MONITORING SYSTEM AND METHOD THEREOF, The Patent Office Journal No. 19/2021, Dated: 07/05/2021, Page No: 22342,
- 4. CONCEPTUAL FRAMEWORK OF A ARTIFIIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT (Indian Patent No.: 202111020974), The Patent Office Journal No: 20/2021, Dated:14/05/2021;, Page No: 23409,
- 5. *IOT SECURITY METHOD & SYSTEM BASED ON THE BLOCKCHAIN* , The Patent Office Journal No: 22/2021, Dated:28/05/2021:, Page No:25373.
- 6. AUTOMATED MATERIAL REPLENISHMENT SYSTEM AND METHOD THEREOF, The Patent Office Journal No: 28/2021, Dated:09/07/2021:, Page No:30676.
- 7. ANALYSIS OF IOT BASED WEATHER MONITORING AND REPORTING SYSTEM USING FUZZY LOGIC, The Patent Office Journal No: 31/2021, Dated:30/07/2021:, Page No:33553.
- 8. GPS AND ENCRYPTION BASED MULTI-CHECK AUTHENTICATION PROCESS FOR PREVENTING FRAUD TRANSACTION, The Patent Office Journal No: 41/2021, Dated:08/10/2021;, Page No:46468.
- 9. IOT BASED HEALTH MONITORING SYSTEM FOR COVID-19 PATIENT, The Patent Office Journal No: 44/2021, Dated: 29/10/2021:, Page No: 50162
- 10. SMART DEVICE FOR FEDERATED LEARNING-BASED CUSTOMER EXPERIENCE MONITORING AND IMPROVEMENT IN WIRELESS COMMUNICATION SYSTEMS, The Patent Office Journal No. 34/2023 Dated: 25/08/2023, Page No: 55023

11. WAVE AND HYDROSTATIC PRESSURE ENERGY GENERATION SYSTEM WITH IOT MONITORING FOR OBTAINING CLEAN ELECTRICITY, The Patent Office Journal No. 35/2023 Dated: 01/09/2023, Page No: 56056

#### **Patents Granted:**

- 1. Australian Patent No.: 2021102839, IP Australia, Australian Official Journal, Vol:35, No. 24, Page No. 5051, 17 June, 2021.
- 2. Australian Patent No.: 2021105092, IP Australia, Australian Official Journal, Vol.:35, No.:40, Page No.: 7869, 7 October, 2021.
- 3. Indian Design Patent No.: 356747-001, Biometric Authentication Device, The Patent Office Journal No. 14/2022 Dated: 08/04/2022, Page No: 23521.
- 4. Indian Design Patent No.: 376694-001, MAIL AUTHENTICATION DEVICE USING BIOMETRICS, The Patent Office Journal No. 07/2023 Dated: 17/02/2023, Page No: 12510.
- 5. Indian Design Patent No.: 376695-001, AUTHENTICATION DEVICE FOR ONLINE TRANSACTION, The Patent Office Journal No. 08/2023 Dated: 24/02/2023, Page No: 13885.
- 6. Indian Design Patent No.: 342910-001, SURGICAL HELMET, The Patent Office Journal No. 11/2023 Dated: 17/03/2023, Page No: 27698.
- 7. Indian Design Patent No.: 394824-001, TREKKER'S SMART SAFETY SHELTER, The Patent Office Journal No. 43/2023 Dated: 27/10/2023, Page No. 75557.
- 8. Indian Design Patent No.: 393644-001, PORTABLE COMPUTER TAB, The Patent Office Journal No. 43/2023 Dated: 27/10/2023, Page No: 75578.
- 9. Indian Design Patent No.: 395202-001, DEVICE FOR WIRELESS TRANSACTION SECURITY ,The Patent Office Journal No.44/2023 Dated:03/11/2023, Page No:76361
- 10. Indian Design Patent No.: 397468-001, ONLINE BANKING SECURITY MONITORING DEVICE, The Patent Office Journal No. 50/2023 Dated: 15/12/2023, Page No. 91121

# **Research Projects Completed:**

- 1. Completed a major Research Project entitled "Detection and remediation of network security vulnerabilities for improved information security in organizational network" funded by Madhya Pradesh Council of Science and Technology (MPCST), Bhopal during 2014-2017.
- 2. Completed a minor Research Project entitled "Information Security Risk Management Framework for small Computing Environment" funded by Vikram University, Ujjain during 2017-2018.
- 3. Completed a minor Research Project entitled "Towards A Conceptual Framework for Mitigation of Vulnerabilities in Smart Office Devices of Internet of Things" funded by Vikram University, Ujjain during 2018-2019.

### **Books Published:**

- 1. Mewada SL & Umesh Kumar Singh, River of Python Programming, Educreation Publishing, Delhi, (ISBN:978-93-91101-99-2).
- 2. S.S. Chandel, Umesh Kumar Singh & K.C. Phuleria, Research Methodology, Tools & Techniques (ISBN: 978-93-8315-804-1), S.K. Book Agency, New Delhi, 2014.

- 3. Umesh Kumar Singh & Gaurav Agrawal, Enterprise Resource Planning (ISBN: 978-81-1767-718-3-X) Shiva Prakashan, Indore, 2014.
- 4. Umesh Kumar Singh, Sumit Jain & Arvind Maheshwari, Fundamental of Computer Science & Information Technology (ISBN: 978-93-8117-668-9), SSDN Publishers, New Delhi, 2012
- 5. Umesh Kumar Singh, Sumit Jain, Arvind Maheshwari& Alaknanda Bhatt,Basic Computer Engineering (ISBN: 978-81-920322-8-3),Vikas Publishers, New Delhi, 2012
- 6. Umesh Kumar Singh, Internet and Web Technology, Images Publication, 2002

#### **Book Chapters:**

- 1. Singh Umesh Kumar & Sharma A., "Cloud computing security framework based on shared Responsibility models" **Book Chapter** in "Cyber-Physical, IoT and Autonomous Systems in Industry 4.0", CRC press Taylor & francis group, 2021, https://doi.org/10.1201/9781003146711 (**WoS & Scopus Indexed**).
- 2. Raghuvanshi A., Singh Umesh Kumar &, Chirag Joshi, A Review of Various Security and Privacy Innovations for IoT Applications in Healthcare. Advanced Healthcare Systems, 2022, pp.43-58. doi: 10.1002/9781119769293.ch4

### **Research Guidance**

- Supervision of Awarded Doctoral Thesis: 15
- Supervision of Doctoral Thesis, under progress: **02**
- Supervision of M.Phil dissertations: **50** +
- Supervision of MCA dissertations: 200+

# Conferences/Seminars/Workshops Organized

- 1. Organized IBM SkillBuild Career Guidance Workshop in Association with REACHA Foundation on 20<sup>th</sup> September, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 2. Organized International Webinar on Youth for Cyber Wellness in Association with Responsible Netism, Mumbai on 12<sup>th</sup> September, 2023 in Vikram University, Ujjain.
- 3. Organized a Workshop on health awareness and role of IT in healthcare Systems on 11<sup>th</sup> August, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 4. Organized a Workshop on Job opportunities in the field of Information Technology3<sup>rd</sup> August, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 5. Organized a National Webinar on "Understanding of Blockchain Technology, Crypto Currency / Deep Web/ Dark Web on 27<sup>th</sup> July, 2023.
- 6. Organized a Workshop on Issues and Software Solutions for NAAC Accreditation on 19<sup>th</sup> April, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 7. Organized a IBM's Skill Build Programme in association with REACHA Foundation on 27<sup>th</sup> March, 2023 in Institute of Computer Science, Vikram University, Ujjain.

- 8. Organized a Faculty Development Program(FDP) on "Recent Trends in Cognitive Science and its Applications from 13<sup>th</sup> March-18<sup>th</sup> March, 2023
- 9. Organized a IBM's Skill Build Programme in association with REACHA Foundation on 24<sup>th</sup> February, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 10. Organized a National Workshop on Internet of Things on 24<sup>th</sup> February, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 11. Organized an International Carrear Counseling & Guidance Workshop on the occasion of National Youth Day on January 12<sup>th</sup>, 2023 in Institute of Computer Science, Vikram University, Ujjain.
- 12. Organized an International Symposium on Cyber Security and Social Engineering on December 30<sup>th</sup>, 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 13. Organized an International webinar on Introduction to System Integration & Middleware on December 29, 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 14. Organized an International Symposium on Cloud Computing on December 28, 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 15. Organized an International Workshop on Office Automation on December, 27, 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 16. Organized an ONLINE FACULTY DEVELOPMENT PROGRAM(FDP) during December 27-30, 2022
- 17. Organized an International webinar on "HOW ARTIFICIAL INTELLIGENCE IS TRANSFORMING THE WORLD" on December 12<sup>th</sup>, 2022 at Institute of Computer Science, Vikram University,Ujjain.
- 18. Organized a National Seminar on "Machine Learning: Treands, Perspectives and Prospects" on May 12<sup>th</sup>, 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 19. Organized a Institute level Event "Startup-ICS Competition" to promote Startup idea among the students of Institute of Computer Science, Vikram University, Ujjain on April 25, 2022.
- 20. Organized an International Workshop on "Cyber Security and Ethical Hacking" on April 23, 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 21. Organized a National Workshop on "Startup India and Personality Development" on April 18 2022 at Institute of Computer Science, Vikram University, Ujjain.
- 22. Organized an International Webinar on "Cyber Awareness for Youth" on December 1, 2021 at Institute of Computer Science, Vikram University, Ujjain.
- 23. Organized a National Webinar on "Master Class on Block Chain Technology, Application and Opportunities" on November 24, 2022.
- 24. Organized 27<sup>th</sup> International Conference of International Academy of Physical Sciences (CONIAPS XXVII) on Mathematics and Science in Ancient India, during October 26-28, 2021 at Institute of Computer Science, Vikram University, Ujjain.
- 25. Organized an International Webinar on "Importance of Skill Optimization in Challenging Time" at Institute of Computer Science, Vikram University, Ujjain on October 9, 2021.
- 26. Organized a National Webinar on "Rashtra Purush: Dr. BhimRao Ambedakar" on September 17, 2021 at Vikram University, Ujjain.
- 27. Organized an International Webinar on "Scope of Automation Testing in IT Industry" at Institute of Computer Science, Vikram University, Ujjain on September 11, 2021.
- 28. Organized an online workshop for the students of Institute of Computer Science, Vikram University, Ujiain on "Prakrati ka Sandesh-Mitti ke ho Ganeshji" on September, 7, 2021.
- 29. Organized a National Webinar on "Startups and New Enterprise Setup" at Institute of Computer Science, Vikram University, Ujjain on September 3, 2021.

- 30. Organized a National Webinar on "Research Possibilities in Blockchain Technology" at Institute of Computer Science, Vikram University, Ujjain on September 2, 2021.
- 31. Organized an International Webinar on "Career Opportunities in field of DevOps" at Institute of Computer Science, Vikram University, Ujjain on August 28, 2021.
- 32. Organized an International Webinar on "Future of Work in Distracted Post Covid World in context of AI, Automation and People" at Institute of Computer Science, Vikram University, Ujjain on June 26, 2021.
- 33. Organized MPCST Sponsored "36<sup>th</sup> MP Young Scientist Congress" on virtual platform as Chief Convener during March 23-26, 2021.
- 34. Organized a 2 days SAKSHAM –IT Training Program, conducted by Microsoft at School of Engineering and Technology, Vikram University, Ujjain during 27- 28, September, 2017.
- 35. Organized a MPCST Sponosored National Seminar on Education Commissions in India as Organizing Secretary in Vikram University, Ujjain during 13-14 December, 2014.
- 36. Organized a National Seminar on Emerging Trends in Computing Technologies in Vikram University, Ujjain as Conference Chairman during 24-25 August, 2014.
- 37. Organized a MicroSoft sponsored 10 days training program for University teachers and officers conducted at Institute of Computer Science, Vikram University, Ujjain during January 16- 25, 2012.
- 38. Organized an AICTE sponsored National Seminar on Security and Privacy "at Institute of Computer Science, Vikram University, Ujjain. During February 28- March 1, 2007.
- 39. Organized an 8 days faculty development programme for the teachers at MIT, MICS, MIM and MIPS at MIT, Ujjain during May 8-15, 2006.
- 40. Organized a 2 days faculty development programme for the teachers of MIT, MICS, MIM and MIPS at MIT, Ujjain during March 29- 30, 2003.

### **Conferences / Seminars etc. Attended**

- 1. Attended a Conference on Traditional and Modern Healthcare under Madhya Pradesh vigyan Sammelan & Expo(MPVS-2021) jointly organized by IIT Indore, MPCST and Vigyan Bharati during 22nd-25th December, 2021.
- 2. Attended a one Week long Online FDP on Intellectual Property Rights in Academic Excellence, Organized by TLC, Tezpur University in association with DPIIT IPR Chair, Intellectual Property Rights (IPR) Cell, Tezpur University during 12-16 July 2021.
- 3. Attended a National Seminar on "Recent Acts of Waste Management in India" organized by Ujjain Engineering College, Ujjain on 27<sup>th</sup> July, 2019.
- 4. Attended One Week Faculty Development Programme (FDP) and completed training on Cyber Security & Cyber War (CnC 2019) at Department of Systemics, School of Computer Science, University of Petroleum & Energy Studies, Dehradun during 3<sup>rd</sup> June to 7<sup>th</sup> June, 2019.
- 5. Attended 5 days induction/refresher programme on "Recent Trends in Remote Sensing and Geographic Information System Technologies" organized by Ujjain Engineering College, Ujjain during 11<sup>th</sup> -15<sup>th</sup>, February, 2019.
- 6. Attended 3 days International Virat Gurukul Sammelan organized by Cultural Department of

- Government of Madhya Pradesh during 28-30 April, 2018.
- 7. Attended Indian Higher Education Knowledge Delegation Seminars at New York University, Massachusetts Institute of Technology (MIT), Harvard University, University of Connecticut, University of Pennsylvania during August 06-12, 2018
- 8. Attended 2 days SAKSHAM –IT Training Program, conducted by Microsoft during 27<sup>th</sup> to 28<sup>th</sup>, September, 2017.
- 9. Attended Higher Education Knowledge Delegation Seminars at University of Oxford, University of Cambridge, Oxford Brookes University, Trinity College, Queen Mary University of London, Brunel University, London during July 10-16, 2017
- 10. Attended a World Congress of Computer Science held in University of California, Berkeley (USA) during October 19-21, 2016 and presented research paper and also chaired a technical session in this world congress.
- 11. Attended an ISTE Short Term Training Programme on Energy Conservation & Audit at UjjainEngineeringCollege, Ujjain (MP) during April 15 -20, 2013
- 12. Participated in MAPCOST sponsored National Seminar on "Intellectual Property Rights" held on 21st April, 2012 at Alpine Institute of Technology, Ujjain.
- 13. Participated in M.P. Govt. sponsored National Conference on "Changing Scenario of Education and M.P. University Act 1973" held during 18-19 February, 2012 at Vikram University, Ujjain.
- 14. Attended a 10 days IT Champion Training Program held during 16-25 January, 2012 at Vikram University, Ujjain.
- 15. Attended an ICCA 2010 (International Conference on Computer Applications) held at Pondicherry, India on 24-27 December, 2010.
- 16. Attended an MTMI, USA sponsored International Conference on Global Issues in Business & Technology held at DAVV, Indore during 22-24 December, 2009
- 17. Attended a 10th European Conference on Knowledge Management held at Università Degli Studi Di Padova, Vicenza, Italy on 3-4, September 2009
- 18. Chaired technical session in 10th European Conference on Knowledge Management held at Università Degli Studi Di Padova, Vicenza, Italy on 3-4, September 2009
- 19. Attended a TEQIP sponsored workshop on "Intellectual Property Rights" organized by UjjainEngineeringCollege, Ujjain on 29th March 2009.
- 20. Attended a two days National Seminar, Sponsored by TEQIP on "Recent Trends in Multimedia and Animation" organized by UjjainEngineeringCollege, Ujjain during, April 16-17, 2007.
- 21. Attended a two days National Seminar NSSCM-07, Sponsored by TEQIP on "Soft Computing Methodology" organized by UjjainEngineeringCollege, Ujjain during, March 19-20, 2007.

- 22. Attended a two days, TEQIP Sponsored Workshop on "VLSI Technology" organized by UjjainEngineeringCollege, Ujjain during, February 24-25, 2007.
- 23. Attended a 21 days UGC sponsored refresher course in Computer Science organized by AcademicStaffCollege, Jamia Millia Islamia, New Delhi during December 7-28, 2006.
- 24. Attended a three days-AICTE Sponsored National Seminar on "Engg. applications and Network Security using Neural Networks and Fuzzy Logic" organized by Mahakal Institute of Technology, Ujjain during Aug. 16-18, 2006.
- 25. Attended a UGC Refresher Programme on "Computer Application and Knowledge Management", School of Studies in Library and Information Science (Faculty of Information Technology), VikramUniversity, Ujjain, from Jan. 04-24, 2005.
- 26. Attended a National workshop on "Water harvesting (for Technical Education Quality Improvement Programme [TEQIP]", UjjainEngineeringCollege, May 15-17, 2005.
- 27. Attended an ISTEWinterSchool, on "Environmental Management: Challenges in 21st Century ",UjjainEngineeringCollege, Ujjain, Dec., 20-31, 2004.
- 28. Attended an International Conference on "Knowledge management", International Institute of Professional Studies (IIPS), D.A.V.V., Indore, October 21-22, 2002.
- 29. Attended a National Seminar on "Management Information System in Technical Education", UjjainEngineeringCollege, Ujjain, I.S.T.E. sponsored, March 10-11, 2002.
- 30. Attended a Refresher Programme on "Mathematical Algorithms and Computer Applications", AcademicStaffCollege, R.D.V.V., Jabalpur (MP)-India, March 19 to April 07, 2001.
- 31. Attended a Refresher Programme on "Research Methodology on Population Development and Continuing Education' School of Studies in Continuing Education, Vikram University, Ujjain, September 6- 26, 2000.
- 32. Attended an AICTE-ISTE summer school on "Microprocessor Controlled Environmental Instrumentation "GovernmentEngineeringCollege, Ujjain, June 7-19, 1999
- 33. Attended an Orientation Programme for Technical Teachers, AcademicStaffCollege, DAVV, Indore, Nov.10, 1997 to Dec. 06, 1997.
- 34. Attended a Workshop on "POWER BUILDER", NIIT, New Delhi, from 12-06-1995 to 16-06-1995 ( as a sponsored candidate of CMC Ltd, New Delhi).

### **Awards and Distinctions**

- □ Honored by "Young Scientist Award 1997", by M.P. Council of Science and Technology, Bhopal (MP).
- □ Awarded by "Best Trainer" award by CMC Ltd. (Education and Training Division), New Delhi for recognition of efforts and devotion to duty displayed to conduct the training

- course "Certificate Training programme for Banks" at Alwar (Rajasthan).
- □ Received Travel Grant from DST, New Delhi to attend 10<sup>th</sup> European Conference on Knowledge Management held at Università Degli Studi Di Padova, Vicenza, Italy during 3-4, September 2009
- Received Appreciation Award, from United States of America Department of Commerce, USA and AICTE, New Delhi for my contribution towards making "Indian Higher Education Knowledge Delegation to the USA" successful and beneficial to the academic fraternity, in August, 2018.
- □ Received Appreciation Award, from ASSOCHAM and AICTE, New Delhi for my contribution towards making "Indian Higher Education Knowledge Delegation to the United Kingdom" successful and beneficial to the academic fraternity in July, 2017.
- □ Received Honorary Appreciation cum Felicitation Award 2017 from GR Foundations in recognition of my efforts and contribution made in development of academic and Industry participation for the betterment of education in August, 2018.
- □ Received Travel Grant from Vikram University, Ujjain to represent Vikram University, Ujjain in World Congress of Computer Science held in University of California, Berkeley (USA) during October 19-21, 2016 and present research paper and to chair a technical sessions in this world congress.
- □ Received Travel Grant from GR Foundations to represent Vikram University as a member of Indian Higher Education Knowledge Delegation to the United Kingdom and visited many renowned universities and colleges of UK including University of Oxford, University of Cambridge,Oxford Brookes University ,Trinity College, Queen Mary University of London, Brunel University, London during July 10-16, 2017
- Received Travel Grant from AICTE, New Delhi to represent Vikram University as a member of Indian Higher Education Knowledge Delegation to the United States of America (USA) and visited many renowned universities and colleges of USA including New York University, New York, Massachusetts Institute of Technology (MIT), Boston Harvard University, Boston, University of Connecticut, University of Pennsylvania.etc. during August 06-12, 2018.
- Received Excellence Award from Vikram University, Ujjain for successfully organizing "36<sup>th</sup> MP Young Scientist Congress "during March 23-26, 2021 on virtual platform as Chief Convener.
- □ Received Excellence Award from Vikram University, Ujjain for accelerating skill development activities and organizing "International Webinar" on 26<sup>th</sup> June, 2021 on virtual platform as Chief Convener.
- □ Received Excellence Award from Vikram University, Ujjain for initiating and founding/establishing 10 innovative cells in Institute of Computer Science for the benefit and betterment of the students in July, 2021.
- Received Excellence Award from Vikram University, Ujjain for accelerating the activities in University Incubation Centre and initiating and directing the startups activities and

starting 9 startups in July, 2021.

- □ Received Appreciation Award from Vikram University, Ujjain for providing support and supervision for development of a documentary movie of Vikram University, Ujjain in July, 2021.
- □ Received Excellence Award-2023 from Police Headquarter Madhya Pradesh, Bhopal for Contribution in designing and guidance in course of Cyber Security for the police trainees.

# **Association with Professional Bodies**

#### Committees and Boards:

- Member Program Committee, 3<sup>rd</sup> International Conference on Internet of Things (CIoT 2021) to be held at Toronto, Canada during 25-26 September, 2021.
- Member, Program Committee, 13<sup>th</sup> International Conference on Networks & Communications (NeCoM 2021) to be held at Dubai, UAE during February 20~21, 2021 (https://necom2021.org/committee).
- Member, Advisory Committee, International Conference on Emerging Trends in Science and Technology, held during 13-14, February, 2021. (<a href="https://www.virtualcom.in/committee.php">https://www.virtualcom.in/committee.php</a>)
- Member, Technical Committee, International Conference on Advances in Computer Engineering and Communication Systems (ICACES-2020) to be held at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad during 13-14, August, 2021.
- Member, Technical Program Committee (TPC), 2<sup>nd</sup> International Conference on Computing, Communications and Cyber Security (IC4S-2020), held at IET, New Delhi during 3-4 Decebmer,2020.
- Member, Technical Committee, International Conference on Advances in Computer Engineering and Communication Systems (ICACES-2021) to be held at VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad during 29-30, May, 2020.
- Keynote Speaker, National Conference on Emerging Trends in Information Technology (NCETIT-2019) organized by Kalindi College, University of Delhi during 1-2 August, 2019. (http://kalindi.du.ac.in/uploads/a2018-19/CS/NCETIT-2019%20brochure\_dateextended.pdf)
- Member, Program Committee, International Conference on Energy Engineering and Smart Grids 2018 (ESG'2018) held at United Kingdom (UK) during June, 25-26, 2018. (https://www.aconf.org/conf\_159220.html)
- Member, Program Committee and Invited to conduct Special Session at International Conference on Communication, Management and Information Technology (ICCMIT-2018) held at Spain during April 2-4, 2018. (https://www.iccmit.net/)
- Member, Advisory Committee, International Virtual Conference on Computer Science Engineering and Technology, held on Virtual Plateform during 25-28, December, 2016.
- Member of Review Committee of International Journal of Network Security.
- Member, Technical Review Committee, International Journal of Computer Science and Information Security (ISSN: 1947-5500)
- Member, Advisory Board, International Research Journal of Computer Science (ISSN: 2393-

- 9842) (https://irjcs.com/advisory-board)
- Member, Technical Review Committee, International Journal of Computer Science and Information Technology (IJCSIS) (ISSN: 1947-5500) (<a href="https://sites.google.com/site/ijcsis/ijcsis-reviewer-list">https://sites.google.com/site/ijcsis/ijcsis-reviewer-list</a>)
- Member, Review Committee, International Journal of Computer Science Issues (IJCSI), (ISSN:1694-0814) (<a href="www.ijcsi.org">www.ijcsi.org</a>)
- Editor-in-Chief, International Journal of Scientific Research in Network Security and Communication (ISSN: 2321-3256) (https://www.ijsrnsc.org/edu\_board.php)
- Editor-in-Chief, Indianjournal.com http://www.indianjournals.com/ijor.aspx?target=ijor:ijsrnsc&type=eboard
- Executive Editor, International Journal of Scientific Research in Computer Science and Engineering (ISSN: 2321-3256) (https://www.isroset.org/journal/IJSRCSE/edu\_board.php)
- Executive Editor, International Journal on Computer Sciences and Engineering (ISSN: 2347-2693) https://www.ijcseonline.org/editorialboard.php
- Member, Advisory Board, International Journal of Engineering Science and Innovative Technology (IJESIT) (ISSN: 2319-5967) <a href="https://www.ijesit.com/page.php?link\_id=2">https://www.ijesit.com/page.php?link\_id=2</a>
- Member, Editorial Board, International Journal of Advances in Engineering & Technology (ISSN: 2231-1963).
- Member, Editorial Board, International Journal of Engineering and Innovative Technology (ISSN:2277-3754-Online)
- Member, Editorial Board, World of Computer Science and Information Technology Journal (ISSN: 2221-0741).
- Member, Editorial Board, International Journal of Engineering, Science and Innovative Technology (ISSN:2319-5967)
- Member of Conference Committee in 14<sup>th</sup> European Conference on Knowledge Management ECKM 2013 held at Kaunas University of Technology, Kaunas, Lithuania during 5-6 September 2013.
- Member of Conference Committee in 13<sup>th</sup> European Conference on Knowledge Management ECKM 2012 held at Universidad Politécnica de Cartagena, Spain during 6-7 September 2012
- Member of Review Committee of 4th IEEE International Conference on Computer Science and Information Technology (ICCSIT 2011) held at Chengdu, China during June 10-12, 2011 (Review Code: ICCSIT-EN40009).
- Member of Review Committee of 3<sup>rd</sup> International Conference on Machine Learning and Computing (ICMLC 2011) held at Singapore during February 26-28, 2011 (Review Code: VIP-ICMLC-C01116)
- Member of Reviewer Committee (Committee Code: EN-C01116) of 3<sup>rd</sup> International Conference on Mechanical and Electrical Technology (ICMET 2011) held at Dalian, China. August 26-27, 2011
- Member of Conference Committee in 12<sup>th</sup> European Conference on Knowledge Management ECKM 2011 held at University of Passau, Germany during 1-2 September 2011

- Member of Technical Committee in "The 2010 International Conference on Manufacturing Science and Technology (ICMST 2010)" held at Kuala Lumpur in November 26-28, 2010.
- Member of Conference Committee in 11<sup>th</sup> European Conference on Knowledge Management ECKM 2010, Universidade Lusíada de Vila Nova de Famalicão, Famalicão, Portugal during 2-3 September 2010.
- Member of Conference Committee in 6<sup>th</sup> International Conference on Intellectual Capital, Knowledge Management & Orgainisational Learning held at McGillUniversity, Montreal, Canada during 1-2 October 2009
- Member of Conference Committee in 10<sup>th</sup> European Conference on Knowledge Management to be held at Università Degli Studi Di Padova, Vicenza, Italy during 3-4 September 2009.
- Member of Conference Committee in 9<sup>th</sup> European Conference on Knowledge Management held at Southampton Solent University, Southampton, UK during 4-5 September, 2008
- Member of Conference Committee in 8<sup>th</sup> European Conference on Knowledge Management held at Barcelona, Spain during 6-7 September 2007.

#### Memberships:

- Life Member (LM 92178) of The Indian Society for Technical Education (ISTE) since 2013.
- Senior Member of International Association of Computer Science and Information Technology (IACSIT), Singapore
- Member (105197) of International Association of Engineers (IAENG), Hong Kong
- Member of Internet Society, Geneva, Switzerland