

Dr. Karm Veer Singh

Assistant Professor
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**Education Qualification**

Name of Degree	Organization	Year of award
B.E.(Computer Engineering)	M.M.M. Engineering College, Gorakhpur	1990
M.S.(Software System)	BITS, Pilani, Rajasthan	2003
Ph.D.(Computer Science and Engineering)	Indian Institute of Technology (BHU), Varanasi	2013

Academic Experience

More than 8 Years (Teaching and Research)

Areas of Research

- Multimedia Information Retrieval
- Data Science
- Medical Imaging
- Quantum Neural Networks
- Reliability
- Cyber Security and Artificial Intelligence

Research/Consultancy Grants

Title of Projects	Funding Agency	Duration (Specific Dates)	Total grant	Role (PI/CO-PI)
Computer Aided Design for Selection of Geo-friendly Instruments	AICTE, New Delhi under TAPTEC scheme	2000 - 2002	09 Lacks	Co-PI

Publications:

1. Kumar V, Maurya AK, **Singh KV**, et al,” Safety analysis of safety-critical systems for their applicability on NPP systems: a state-of-the-art review.”, **Quality and Reliability Engineering International**, 2021;1-37. <https://doi.org/10.1002/qre.2828>
2. Vinay Kumar, Lalit Kumar Singh, Pooja Singh, **Karm Veer Singh**, Ashish Kumar Maurya, and Anil Kumar Tripathi, “Parameter Estimation for Quantitative Dependability Analysis of Safety-Critical and Control Systems of NPP”, **IEEE Transactions on Nuclear Science**, Vol. 65, No. 5, pp. 1080-1090, May 2018.
3. **Singh K.V.** and A.K. Tripathi, “Emotion Based Contextual Semantic relevance feedback in Multimedia Information Retrieval”, **International Journal of Computer Applications**, 55(15): 38 - 49, 2012, ISSN No. 0975 – 8887.
4. **K.V. Singh** and A.K. Tripathi, “ Contextual Query Perfection by Affective Features Based Implicit Relevance Feedback in Multimedia Information Retrieval”, **IJCSI International Journal of Computer Science Issues**, Vol. 9, Issue 5, No. 3, pp. 191-202,2012, ISSN (Online): 1694 – 0814.

Seminar/Conference/Symposia /Workshops Attended**Conferences:**

K.V. Singh “Performance Enhancement of Contextual Query Perfection by GMM Based Contextual Semantic Descriptor in Affective Features Based Implicit Contextual Semantic Relevance Feedback”, **International Conference on Artificial Intelligence and Soft Computing (AISC-2012)**, 7-9 December 2012, IIT-BHU Varanasi, India

Workshop:

- (1) Attended International Workshop on Recent Advances in Biometric Systems on 15th -16th April, 2005, I.I.T., Kanpur
- (2) Attended Research Promotion Workshop on Introduction to Graph and Geometric Algorithms 27th –29th January 2010, I.T., B.H.U., Varanasi

Other activities/responsibilities: (academic/administrative)

1. Coordinator, Department of Computer Engineering, UIET, Babasaheb Bhimrao Ambedkar University, Lucknow.
2. Member of External Experts Committee for review of finalization of Technical Specifications and Evaluation of I.T. infrastructure, Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGI), Lucknow.
3. Nodal Officer of IPv6 Transition Team.

Additional Information (If Any)

Expert programming assistance in AI and ML, Data Analytics, HPC, Multimedia Information retrieval, Parallel and Distributed Computing to Researcher and Faculties of Institutes and Departments of University in their Project Designing, preparation of DPR, Implementation and its completion.

Develop various AI and ML, Statistical Models and Analytical modules based upon advanced scheduling algorithms to create applications on own API Frameworks for Researcher, Data Scientist and Analyst and Faculties of the University.

Lead Team of Software Developers in developing various software's as per University needs.

Configuration, Administration, Monitoring, Optimization of Link Aggregator cum Load Balancer, Security appliance Firewall, Routers, Core Switches, Distribution Switches, Wireless Controller, Access Points.

Mentoring team members of technology professionals at different hierarchy levels (i.e. Programmers, Maintenance Engineers, Network Engineers, Software Engineers) to design, build, configure, monitor and tune the configuration of interfaces across integration development of various software's developed as per University needs and to ensure high availability, performance, scalability, stability, and security of the software products once deployed in production environment.

Network Security Audit and Cyber Security through log analysis, administration, configuration, optimization and customization of I.T. infrastructure deployed in BHU campus. Backup and restoration of Systems' data, HPC Data, ERP Data, Web Services Data and Users' Email data, etc. on Network Storage devices.

System Administration, Configuration, Optimization, and Customization of BHU mail services, Web Services, SPAM prevention, SMTP and Access Log Analysis of BHU mail service.

Squid /Proxy installation, Configuration, and Optimization. Access Log Analysis of Squid and report generation.

Communicate cross-functionality, collaborate with University Administration, Researcher, Faculties, Engineers and Technical teams to plan and deliver solutions along with sought information on time by University Administration.