

# **Faculty Performa**

Title Dr.	First Name	Anjani	Last Name	Kumar	Photograph	
Designation	Assistant Profe	ssor				
Address	Cluster Innovation Centre, Room No. 312, Third Floor, Rugby Sevens Building, G. C. Narang Marg, University Stadium, University of Delhi, Delhi-110007.					
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Residence Mobile	+91-99680148	04				
Email	akumar@cic.c	akumar@cic.du.ac.in; anjaniverma29@gmail.com				
Web-Page	https:/cic.du.ac.in/ https://sites.google.com/site/knowakverma/home			2023/2/74		
Educational Qualificati	ons					
Degree	Institu	ition				
<b>Ph.D.</b> Computer Science	Dept. o	Dept. of Computer Science, University of Delhi				
PG M.Sc. Computer Science	Dept. o	Dept. of Computer Science, University of Delhi				
UG B.Sc. (Hons) Computer Scie		PGDAV College, University of Delhi				
Career Profile						
Cluster Innovation Centre Assistant Professor Maitreyi College, Universit Assistant Professor Shyama Prasad Mukherji G Assistant Professor Keshav Mahavidyalaya, Un Guest Lecturer ACS Associate Engineer Vinove Software & Service HTML Developer	ty of Delhi College, Universi niversity of Delhi	ity of Delhi			Delhi July 2015 - Till present Delhi July 2014 - July 2015 Delhi July 2012 - July 2014 Delhi Jan 2012 - Apr 2012 Noida Feb 2012 - Dec 2012 Delhi June 2011 - Dec 2011	

Administrative Assignments	
Academic Year	Assignments
2023-2024	Convener & IQAC Nodal Person, IQAC & Annual Report Committee, CIC
	Member, Taskforce Committee, NAAC, CIO
	Member, Admission Committee, CIO
	• Member, Alumni Committee, CIO
	Member Discipline Committee, CIC
2022-2023	• Convener, IQAC Committee, CIC
	Member, Admission Committee, CI
	• Member, Alumni Committee, CIO
	Member Discipline Committee, CIC
2021-2022	• Convener, IQAC Committee, CIO
	Member, Admission Committee, CIO
2020-2021	Convener, Computer & Website Committee, CIC
	Member, Academic Committee/Online teaching related Committee, CIC
	Member, Departmental Purchase Committee, CI
2019-2020	Convener, Computer & Website Committee, CIC
	Member, Academic Committee, Clo
	Coordinator, Project Committee, B.Tech, Clo
2018-2019	Member, Admission Committee, CIC
	Member, Computer & Website Committee, Clo
	Member, Workload & Time -Table Committee, Cle
2017-2018	Member, Admission Committee, CIC
	Member, Computer & Website Committee, Cle
	Member, Workload & Time -Table Committee, Cle
2016-2017	Member, Admission Committee, CIC
	Member, Examination Committee, Classical Activity of the committee, Classical Activity of the committee activity of t
	Member, Infrastructure & Space Committee, Cle
	Member, Grievance Committee, Clu
	Member, News Letter, Annual Report, Website Committee, Clu
	Member, Library Committee, Clu
	Member, Cultural and Extra-Curricular Activities Committee, Cl
	Member, Website Advisory Committee, University of Delha

2015-2016	Member, Admission Committee, CIC
	Member, Examination Committee, CI
	• Member, Panel for 'Selection of BA (H) Humanities and Social Science', Clo
Areas of Interest /	Specialization
	achine Learning and Big data: Design, Modeling and Solutions of real life problems through MI
	porithms.
	formation Security Systems: Real-life applications that make information secure and safe from misuse. eganography & Steganalysis: The art of hiding message into digital image and the detection of it.
• Re	commender System: Recommendation of different items/products to make liking pattern and somewhat curity issues in it.
• Ex	<b>pert Systems</b> : Making machine intelligent to think and act accordingly like human computer interaction. <b>rtual Reality</b> : Designing prototype for virtual classroom interactive sessions with 3D review.
• Ar	<b>tificial Intelligence in Historical Innovation</b> : Study of innovative and creative scriptures and monument d its aspects.
Subjects Taught	
	: Computer and Brain: Knowledge Discovery and Artificial Intelligence
Odd Semester – 2023	: Software Engineering and Project Management
	: Computer Graphics & Visualization
	: Computing Systems Architecture 3: Object Oriented Programming
	: Coject Oriented Programming : Instructing computing devices: Operating System
	: Data Structure & Design
Odd Semester – 2022	: Computer and Brain: Knowledge Discovery and Artificial Intelligence
	: Software Engineering and Project Management
	: Handling information through Data Modeling & Design
	: Computer Graphics & Visualization 2: Reflecting thought processes via Object Oriented Programming
	: Instructing computing devices: Operating System
	: Automating real world through Programs: Programming Fundamentals
	: Understanding Computing Systems Architecture
	: Handling information through Data Modeling & Design
	: Software Project Management I: Instructing computing devices: Operating System
	: Reflecting thought processes via Object Oriented Programming
	: Automating real world through Programs: Programming Fundamentals
	: Understanding Computing Systems Architecture
	: Handling information through Data Modeling & Design
	: Software Project Management ): Reflecting thought processes via Object Oriented Programming
	: Optimizing memory use through Data Structure and Design
	: Instructing computing devices: Operating System
	Handling information through Data Modeling & Design
	: Instructing computing devices: Operating Systems
	: Software Project Management D: Reflecting thought processes via Object Oriented Programming
	: Understanding Computing Systems Architecture
	: Handling information through Data Modeling & Design
	: Computer and Brain: Knowledge Discovery and Artificial Intelligence
	: Software Project Management
	<ul> <li>Reflecting thought processes via Object Oriented Programming</li> <li>Understanding Computing Systems Architecture</li> </ul>

Odd Semester - 2017: Handling information through Data Modeling & Design Odd Semester - 2017: Computer and Brain: Knowledge Discovery and Artificial Intelligence Odd Semester - 2017: Software Project Management Even Semester - 2017: Reflecting thought processes via Object Oriented Programming Even Semester - 2017: Computer Graphics & Visualization Odd Semester – 2016: Instructing computing devices: Operating Systems Odd Semester - 2016: Handling information through Data Modeling & Design Odd Semester - 2016: Computer and Brain: Knowledge Discovery and Artificial Intelligence Even Semester - 2016: Reflecting thought processes via Object Oriented Programming Even Semester - 2016: Understanding Computing Systems Architecture Odd Semester - 2015: Instructing computing devices: Operating Systems Odd Semester - 2015: Handling information through Data Modeling & Design Odd Semester - 2015: Computer and Brain: Knowledge Discovery and Artificial Intelligence Odd Semester - 2015: Digital Security: Compression and Encryption Odd & Even Semester - From 2012 to 2015 (in UG College): Internet Technologies System Administration & Maintenance Computer Fundamentals Computer Applications in Business Programming Fundamentals Data Structures Database Systems and Multimedia Applications Research Guidance/Project Supervision Shilling Attack Detection in web Recommendation Systems Riya, Ayushi, Shruti, Archi B.Tech(ITMI)-2023 Semester Long Project thecart admin panel - ecommerce admin panel Rajan, Premchand Gurjar B.Tech(ITMI)-2023 Semester Long Project **Fitness Website** Vipul Wasnik B.Tech(ITMI)-2023 Semester Long Project **App Development** Ansh, Harsh, Pintu, Rajan, Raman, Ojus B.Tech(ITMI)-2022 Summer Internship Project Youtube video translator Abhishek, Javaram B.Tech(ITMI)-2022 Summer Internship Project **Detection of Fake Reviews using Python** Akash Erugurala, Nandan, Piyush, Pratibha, Rakesh B.Tech(ITMI)-2021 Semester Long Project Web Portal of Cluster Innovation Centre Zaleesh Ahmad, Naveen Kumar B.Tech(ITMI)-2021 Major Industrial Project **Image Steganalysis** Nancy B.Tech(ITMI)-2020 Semester Long Project **Building Custom Android ROM+Kernel** Akshansh Bhanjana B.Tech(ITMI)-2020 Semester Long Project **Drowsiness detection system** Arjit Yadav B.Tech(ITMI)-2020 Semester Long Project **Application development** Hitesh Gautam, Sahil Gupta B.Tech(ITMI)-2020 Semester Long Project Secure System for Misuse of Use Zaleesh Ahmad, Sahil Gupta Semester Long Project B.Tech(ITMI)-2020 Zaleesh Ahmad, Paras Yadav AI-enabled Login System using Facial Recognition B.Tech(ITMI)-2020 Summer Internship Project Statistic Analysis of Crime In India Bhanu Mittal, Bhawna Maharana B.Tech(ITMI)-2019 Semester Long Project **Satellite Image Analysis** Arjit Yadav, Shreyansh Tripathi B.Tech(ITMI)-2019 Semester Long Project Web App to write data from selected text from PDF to Manas Awasthi Github **Repository (Cloud) or Local File** Semester Long Project B.Tech(ITMI)-2019

Smart Environment: Energy Conservation B.Tech(ITMI)-2018 Earthquake Interface B.Tech(ITMI)-2018 Developing and Designing E-Portfolio Website B.Tech(ITMI)-2018 Recommender systems B.Tech(ITMI)-2018

Shilling attacks in Recommender Systems *B.Tech(ITMI)-2017* 

Digital Image Steganography B.Tech(ITMI)-2016 PHP Back end development, GEMS and Being Citizen B.Tech(ITMI)-2016 Legally Updated B.Tech(ITMI)-2016 Online Help Desk B.Tech(ITMI)-2016 Vivek, Tapas Kashyap, Animesh Kujur Semester Long Project Bhanu Mittal Summer Internship Project Arjit Yadav, Zaleesh Ahmad Summer Internship Project Prachi Arora Summer Internship Project

Divya, Lavnish, Vivek, Ayush Raj, Sumit Lakra Semester Long Project

Ayush Jain, Aditya Gaur, Arish Semester Long Project Kaustabh Joshi Major Industrial Project Rohan Bhardwaj Major Industrial Project Chetan Raghav, Prince Soni, Rupal Gupta, Yashasvi Khanna Summer Internship Project

Virtual reality in different aspects with multimedia applications B.Sc. Hons. (Comp. Sci.)-2013 Image Steganography B.Sc. Hons. (Comp. Sci.)-2013 Cheshta Mittal, Komal Sharma Research Work Project Shobha Research Work Project

#### Publications Profile

- Anjani Kumar, Pintu Kumar, Sai Yash & Rohit Sharma. Analytics Of Indian English News Articles Through Deep Learning. Journal of Mathematical Sciences & Computational Mathematics, Vol.4, No.3, April 2023; 345-353. (ISSN: 2688-8300 (Print)); (ISSN: 2644-3368 (Online)) [Citation: 0, Impact Factor: NA]
- Verma AK, Dixit VS. Collaborative filtering-based recommendations against shilling attacks with particle swarm optimiser and entropy-based mean clustering. International Journal of Information and Computer Security. 2023; 20(1-2): 133-44. (ISSN: 1744-1765) [Citation: 0, Impact Factor/Cite Score: 1.0]
- Verma AK, Dixit VS. FRRS: Facial Recognition based Recommender System for handling Push and Nuke Attacks. METSZET JOURNAL. 2022; 7(12): 388-395. (ISSN: 2061-2710) [Citation: 0, Impact Factor: 5.3]
- Anjani Kumar Verma, Veer Sain Dixit. SRSPIA: Security Based Recommender System Against Profile Injection Attack. International Journal of Engineering Trends and Technology, 2021, 69(3), 219-228. (ISSN: 2349-0918) [Citation: 1, Impact Factor/Cite Score: 0.5]
- Mittal B, Verma AK, Bagai S. A Study of Crime in India Through Statistical Analysis. In ICT for Competitive Strategies 2020 May 5 (pp. 361-367). CRC Press. (ISBN: 9781003052098) [Citation: 0, Impact Factor: NA]
- Anjani Kumar Verma and Veer Sain Dixit. An outlier accuracy improvement in shilling attacks using ksom. In Intelligent Communication, Control and Devices 2020, (pp. 353-365). Springer, Singapore. (ISSN: 21945357); (ISBN: 978-981138617-6) [Citation: 1, Impact Factor: NA]
- Anjani Kumar Verma and Veer Sain Dixit. A Comparative Evaluation of Profile Injection Attacks. In Advanced in Data and Information Sciences 2019, (pp. 43-52). Springer, Singapore. (ISSN: 23673370) [Citation: 1, Impact Factor: NA]
- Anjani Kumar. Review of Comparative Evaluation: Image Steganography. International Journal of Scientific Research in Computer Science, Engineering and Information Technology, Volume 2, Issue 5, September-October 2017. (ISSN: 2456-3307) [Citation: 0, Impact Factor: NA]
- Anjani Kumar Verma and Girish Chandra. A Review Aspect on Digital Watermarking. Conjugative Management, Library Information Science, Social Science and Technology for Virtual World, January 2017. (ISBN: 978-1- 63535-633-5) [Citation: 0, Impact Factor: NA]
- Anjani Kumar Verma and Girish Chandra. A Study on Market Return for an Investor: Comparative Analysis of BSE and SSE. International Journal of Research & Development in Technology and Management Science –Kailash, Volume 22| Issue 6 | 2016 | ISBN 1-63102- 468-X; European Article Number [EAN] 978-1-63-102468-9 [Citation: 0, Impact Factor: NA]
- Anjani Kumar Verma. A Review on classification based approaches for Steganalysis Detection. International Journal of Computer Application Technology and Research, Volume 3- Issue 7, 439-445, July 2014. (ISSN: 2319-8656) [Citation: 1, Impact Factor: NA]

- Anjani Kumar Verma. A Non-Blind Steganalysis through Neural Network Approach. International Journal of Multidisciplinary Consortium, Volume-1, Issue-1, June 2014. (ISSN: 2309-073X) [Citation: 6, Impact Factor: NA]
- Anjani Kumar Verma. Steganalysis Detection through Statistical Features. Innovation Practices in Information Technology & Operation Management, January 2014. (ISBN: 978-81-906991-9-7) [Citation: 1, Impact Factor: NA]

# Paper Presentations

- An Accuracy Improvement in Facial Verification through Siamese Neural Networks, 4th National Conference on Recent trends in IOT, Machine learning, Artificial Intelligence and its Applications (NCRIMA 2023), Bhopal, India, April 24-25, 2023, IEEE.
- An Earthquake prediction through BNN, International Conference On Recent Advancement and Innovation In Engineering & Technology (RAIET 2023), Lucknow, India, February 24-25, 2023, IEEE.
- An Outlier Accuracy Improvement in Shilling Attacks Using KSOM, The 3<sup>rd</sup> International Conference on Intelligent Communication, Control and Devices (ICICCD). Dehradun, India, 23<sup>rd</sup> 24<sup>th</sup> Dec 2018, Springer.
- A Comparative Evaluation of Profile Injection Attacks, International Conference on Data and Information Systems (ICDIS). Amarkantak, India, 17<sup>th</sup> 18<sup>th</sup> Nov 2017, Springer.
- A Review Aspect on Digital Watermarking, International Conference on Conjugative Management, Library Information Science, Social Science and Technology for Virtual World (ICCLIST). Delhi, India, 15<sup>th</sup> Jan 2017.
- Steganalysis Detection through Statistical Features, Conference on Innovative Practices in Information Technology and Operations Management (INNOVATIONS). New Delhi, India, 17<sup>th</sup> Jan 2014.

Research Projects (Major Grants/Research Collaboration)

• Co-Principal Investigator, Innovation project, Translating "Lilavati of Bhaskara" in the realm of present Mathematics Curriculum funded by Delhi University, 2015-2016.

# Awards and Distinctions

- Faculty Start Up Grant, University of Delhi, 2015.
- Awarded UGC NET in Computer Science & Applications, 2012.
- Honour Appreciation from DUCS SANKALAN Technical Fest in Department of Computer Science, University of Delhi, as an Event Coordinator of **Technospeak**, 2010.
- Secured 3rd rank in B. Sc. (Hons.) Computer Science in PGDAV College, 2009.
- Honour Appreciation from CS- Xenium Technical Fest in PGDAV College, University of Delhi, as an Event Coordinator CANVAS- Web Designing, 2008.
- Secured 3rd rank in Science Fair Zonal Exhibition, 2003.
- Won Appreciation in Writing and Painting competition, 2002-2003.

# Association With Professional Bodies

- Member Association of Computing Machinery (ACM)
- Member The Institute of Electrical and Electronics Engineers (IEEE)

Other Activities				
<b>Faculty Development Programme</b> Recent Trends & Challenges in Intelligent System and	Amity School of Engineering & Technology, Amity University, Patna, India			
Machine	25 <sup>th</sup> - 29 <sup>th</sup> July 2022			
Workshop: AI for Computational Social Systems	IIITD, Delhi, India			
Computational Social Systems, NLP and related areas both from industry and Academic	26 <sup>th</sup> - 27 <sup>th</sup> Nov 2021			
Faculty Development Programme	TLC, Ramanujan College, University of Delhi, India			
Academic Writing for Research	11 <sup>th</sup> - 17 <sup>th</sup> Oct 2021			

Refresher Course	TLC, Ramanujan College, University of Delhi, India	
Next Generation Technologies	29 <sup>th</sup> June - 13 <sup>th</sup> July 2021	
Faculty Development Programme	Keshav Mahavidyalaya, University of Delhi, India	
Creation and Development of MOOCs while managing	24 <sup>th</sup> - 31 <sup>th</sup> Aug 2021	
Online Classes		
Webinar: Managing References Made Easy Using	Miranda House, University of Delhi, India	
Mendeley	27 <sup>th</sup> July 2021	
Researcher Academy On Campus provides the benefits of		
free Mendeley Reference Manager Webinar: Are Digital Innovation Opportunities around	CIC, University of Delhi, India	
the Corner?	8 <sup>th</sup> May 2020	
What, Where and How can these innovate?	8 May 2020	
What, where and now can these innovate? Workshop: Robotics by EYANTRA	IIT Bombay, Mumbai, India	
Applications and Approaches	$7^{th} - 8^{th} Jan 2020$	
Refresher Course	HRDC, DAVV, Indore, MP, India	
IDC Computer Application	14 <sup>th</sup> Nov - 4 <sup>th</sup> Dec 2018	
Workshop: IDA Connect by UK Companies, CIET,	DIDAC, Delhi, India	
NCERT, CBSE and EQFI	$4^{th}$ - $6^{th}$ Oct 2018	
Transforming Teaching-Learning thorough Big Data	7 - 0 001 2010	
Analysis		
Orientation Course	CPDHE, University of Delhi, India	
OR-91	$21^{st}$ Nov - $19^{th}$ Dec 2017	
Seminar: Embedded Software Safety & Security	LDRA Academic Alliance Program (LAAP), Delhi, India	
Safe and Secure Embedded Systems Development	13 <sup>th</sup> Oct 2017	
Seminar: Bayesian Networks- AI for Research, Analytics,	Bayseia, USA, LLC	
and Reasoning	$20^{th}$ Sep 2017	
Exploring AI for Complex problems with Tools		
Workshop: FICCI-IPO Awareness Program on	FICCI, Govt. of India, Delhi, India	
Intellectual Property Rights (IPR)	15 <sup>th</sup> Sep 2017	
National IPR policy and its importance in socio-economic		
development for India		
Workshop: How to Write and Publish Scholarly Articles	JMI & Springer Nature New Delhi, India	
Publication Ethics	24 <sup>th</sup> Aug 2017	
Workshop: Technology & Innovation Management- Key	BCIL, New Delhi, India	
to effective Commercialization	21 <sup>st</sup> Feb 2017	
Technology Development and Commercialization		
Workshop: Big Data Analytics (WBDA-2017)	SCSS, Jawaharlal Nehru University, New Delhi, India	
Big Data Challenges and Issues	$17^{th} - 18^{th} Mar \ 2017$	
Workshop: HPC Code Modernization (Parallelization)	Dept. of Computer Science, University of Delhi, India	
Technology explained by Wipro Limited	15 <sup>th</sup> Oct 2016	
Workshop: Robotics	Cluster Innovation Centre, University of Delhi, India	
Introduction to Robotics	14 <sup>th</sup> – 15 <sup>th</sup> Sep 2015	
Faculty Development Programme	DIAS, GGSIP University, Delhi, India	
Data Mining and Big Data Analytics: Concepts, Techniques,	13 <sup>th</sup> -14 <sup>th</sup> June 2014	
Tools and Research Directions		

# Events Organization: Conferences/Workshops/Seminars

- Organizing Member, Seminar on National Seminar on Innovation in Higher Education through PPP Model (for effective implementation of NEP 2020) held in Cluster Innovation Centre, University of Delhi from 13th-15th March 2023.
- Faculty Coordinator, Workshop on Game Development held in online mode in Cluster Innovation Centre, University of Delhi on 4<sup>th</sup> June 2022.
- Faculty Coordinator, Workshop on Ethical Hacking & Cyber Security held in Shyama Prasad Mukherji College, University of Delhi on 13<sup>th</sup> 14<sup>th</sup> March 2014.

# Conferences/Workshops/Seminars/Webinars Achievements and Awards

• Jury Member, National Level Website Development Competition under SPECTRA 2021 organized by Gujranwala Guru Nanak Khalsa College, Civil Lines, Ludhiana, Punjab, India. 25<sup>th</sup> June 2021.

# Invited Lectures/Talks

- Resource person for Technical Session, Webinar on Technological advancements of physics in artificial intelligence organized by Department of Physics, GGN Khalsa College, Civil Lines, Ludhiana, Punjab, India. 7<sup>th</sup> December 2021.
- Resource person for Technical Session, UGC Sponsored Two-day National Seminar on Changing Business Environment in India: Challenges and Opportunities organized by Department of Commerce, Shyama Prasad Mukherji College, University of Delhi. 28<sup>th</sup> - 29<sup>th</sup> February 2020.

#### Academic Projects **Image Steganalysis** Prof. Punam Bedi Image processing for detecting data into it. Extracting the message from stego images from different NN techniques. **Digital Image Steganography** Prof. Punam Bedi Image processing for hiding data into it. Hiding message into cover images with neural network approach. **File System Development** Dr. Harmeet Kaur Designed and developed a file management system for Unix based structure. Creation of text files in it. Mini database- Mydbms Development Dr. Harmeet Kaur Implementation of Mydbms system using Netbeans6.5 IDE. Different schemas for general purposes. **Student Record System** Dr. Akansha Vats Managing the student activities in college. Multimedia and VR Support for Direct Communication of Designers Dr. Veenu Bhasin Covering the aspects of virtual reality with multimedia.

### Skills

- **Programming Languages:** C, C++, PHP, Java, Python, HTML/CSS, Java Script.
- Platforms and Tools: Windows, Linux, Dreamweaver, NetBeans IDE, MATLAB, Office365, Google-Meet, Google-Classroom, Zoom app, Moodle Cloud, R Studio.
- AI Frameworks: Scikit-learn.
- Big Data Frameworks: Hadoop, Weka, RapidMiner.

Anjani Kumar Signature of Faculty Member

(Updated in August, 2023)