


# Cluster Innovation Centre



...Evolving Senses  
Dissolving Boundaries...

संकुल  
नवप्रवर्तन  
केंद्र

## Faculty Pro forma

Title	Mr.	First Name	Sachin	Last Name	Kumar	Photograph
Designation		Assistant Professor				
Address		204, Cluster Innovation Centre, University of Delhi, Delhi				
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	Residence					
	Mobile	+91-9711771381				
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Web-Page		<a href="https://ducic.ac.in/">https://ducic.ac.in/</a> <a href="http://people.du.ac.in/~skumar1/">http://people.du.ac.in/~skumar1/</a>				
Educational Qualifications						
Degree		Institution			Year	
PhD		Dept. of Computer Science, University of Delhi			Pursuing	
MCA		Dept. of Computer Science, University of Delhi			2011	
BSc		Meerut College Meerut, CCS University			2007	
Career Profile						
Organisation : Information Mosaic Software Pvt. Limited-Ireland Duration : 1 <sup>st</sup> Aug 2011 to 6 <sup>th</sup> August 2012.						

Organisation : Information Mosaic Software Pvt. Limited-Ireland

Duration : 2<sup>nd</sup> Jan 2011 to 31<sup>st</sup> July 2011.

Organization : Deen Dayal Upadhaya College, Delhi University

Duration : 23<sup>rd</sup> July 2012 to 23<sup>rd</sup> July 2013.

Organization : Indraprastha College for Women, Delhi University

Duration : 24<sup>th</sup> July 2013 to 19<sup>th</sup> Dec 2014.

Organization : Atma Ram Sanatan Dharma College, Delhi University

Duration : 12<sup>th</sup> Jan 2014 to 15<sup>th</sup> July 2015.

Organization : Cluster Innovation Centre, Delhi University

Duration : 16<sup>th</sup> July 2015 to Till date

#### Administrative Assignments

- Convener, Website Committee, CIC, 2017-2018.
- Member, Exam Committee, CIC, May 2017-2018.
- Member, Newsletter, Annual Report, Website Committee, CIC, 2015-2016.
- Member, Grievance Committee, CIC, 2015-2016
- Member, Exam Committee, CIC, May 2015-2016.
- Member, Exam Committee, CIC, May 2015-2016.
- Member, Semester Long Project Monitoring, CIC, 2015-2016
- Member, Panel for 'Selection of BA (H) Humanities and Social Science', CIC, 2015-2016.

#### Areas of Interest / Specialization

- Intelligent Systems
- Computer Vision
- Urban Informatics
- Human Dynamics
- Information Technology Systems
- Design and Innovation
- Start-Up Consultancy.
- Governance, Social Systems and Machine

#### Subjects Taught

- Fall-2019: Software Project Management
- Fall-2019: Optimizing memory use through Data Structure and Design ○
- Fall-2019: Data Communication and Computer Networks

- Spring-2018: ICT in Mathematics
- Spring-2018: Software Engineering
- Fall-2017: Software Project Management
- Fall-2017: Optimizing memory use through Data Structure and Design ○
- Fall-2017: Data Communication and Computer Networks
- Spring-2017: Handling Information through Data Modeling and Design
- Spring-2017: Advanced Algorithm Design
- Spring-2017: Software Engineering
- Fall-2016: Optimizing memory use through Data Structure and Design
- Fall-2016: Data Communication and Computer Networks
- Spring-2016: Handling Information through Data Modeling and Design
- Spring-2016: Advanced Algorithm Design
- Spring-2016: Software Engineering
- Fall-2015: History, culture and civilization
- Fall-2015: Programming Fundamentals
- Fall-2015: Optimizing memory use through Data Structure and Design

#### Research Guidance

##### ***Semester-Long Projects***

- Emotion Classification and Assessment: Sanjeev Dubey, Utkarsh Mittal, 2018
- SmartEnvironment: Energy Conservation: Vivek, Tapas Kashyap, Animesh Kujur, 2018
- Human Activity Recognition for Assisted Living: Chaitali Saini, Lakshya Juneja, 2018
- Deep Learning for Health Informatics: Arjun Sharma, Anuthstha Kalia, 2018
- Neeraj Kumar, Vishesh Sharma: Akshit Nagpal, MOOCs-2017
- Driver Assistance Development: Arjun Sharma, Anuthstha Kalia -2017
- Social Care: Utkarsh Anand, Mukul Yadav, 2016
- On This Day: Pappu Kumar, Neeraj Chauhan, 2016
- DU-iNFO: Sagar, 2016

#### Publications Profile

- Kumar, Sachin; Pal, Saibal K.; Empirically developed integrated ICT framework for PDS in developing countries, Third World Congress on Information and Communication Technologies (WICT), vol-3, pp: 235-240, 2013, IEEE, ISBN: 978-1-4799-3230- 69.

- Sachin, Kumar; S K, Pal; ICT Integrated Social Media Framework for Consumer Awareness in Society Using ICT tools, IEEE/ACIS 13th International Conference on Computer and Information Science (ICIS) vol-13, pp: 229 - 233, 2014 IEEE ISBN-978-1-4799- 4860-4.
- Sachin, Kumar; S K, Pal; An Approach to Ensure Superior and Sustainable Software Development Performance, International Conference on Computing for Sustainable Global Development; pp: 115 - 117, 2014 IEEE, ISBN 978-93- 80544-10- 6.
- Kumar, Sachin; Shobha; Pal, Saibal K.; A New Sustainable Prototype USP for Education Information System, International Conference on Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE), Noida, Vol-1, pp.174-179, 2015, IEEE, ISBN:978-1-4799-8432- 9.
- Kumar, Sachin; Pal, Saibal K; Singh, Rampal; Intelligent Energy Conservation: Indoor Temperature Forecasting with Extreme Learning Machine, Proceedings of Intelligent Systems Technologies and Applications, vol-2, pp-977- 988, 2016, Springer Switzerland, Online ISBN: 978-3- 319-47952- 1.
- Kumar, Sachin; Shobha; Pal, Saibal K.; Singh, Rampal; ELM Variants Comparison on Applications of Time Series Data Forecasting, Proceedings of International Conferences on Advances in Computing, Communications and Informatics (ICACCI), 2016, pp:1409-1414, 2016, IEEE, Electronic ISBN: 978-1- 5090-2029- 4.
- Kumar, Sachin; Singh, Rampal; Pal, Saibal K; A Conceptual Architectural Design for Intelligent Health Information System: Case Study on India, Quality, IT and Business Operations: Springer Proceedings in Business and Economics pp: 1-15, 2018 Springer, Singapore, Online ISBN: 978-981- 10-5577- 5.
- Sachin Kumar, Anushtha Kalia, and Arjun Sharma. Predictive Analysis of Alertness Related Features for Driver Drowsiness Detection. Advances in Intelligent Systems and Computing, Springer, 736:368–377, 2018.

#### Conference Organization/ Presentations (in the last three years)

- Presented Paper: Sachin Kumar, Dr. Saibal K. Pal “An Improved Post-Quantum Cryptographic Scheme Based on NTRU” in International Conference on Quality Reliability Infocom Technology and Industrial Technology management, Delhi University, 2013.
- Presented Paper: Sachin Kumar, Dr. Rampal Singh, Dr. Saibal K. Pal “Assessment and Prospects of Big Data Analytics in Public Policy in India”“ IIMA 4th International Conference on Advanced Data Analysis, Business Analytics and Intelligence, IIM Ahmedabad, IC 15/074, 2015

- Presented Paper: Sachin Kumar, Dr. Rampal Singh, Dr. Saibal K Pal, “A Conceptual Architectural Design for Intelligent Health Information System: Case Study on India, 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations (Trends and Future Directions), 2015.

#### Research Projects (Major Grants/Research Collaboration)

- Co-PI in innovation project, “Weaving Dreams for Destitute – Night Shelters” funded by Delhi University :( 2015-2016).

#### Awards and Distinctions

- Selected in PhD for Information Technology and Systems - IIM Rohtak 2014
- UGC-FCIT, Workshop
- UGC-NET with JRF -2012.
- Got placement Offer from Several MNCs
- Secured 7<sup>th</sup> rank in JAM-2008 for Mathematics Entrance Exam conducted by IITs.
- Won 1st prize for Event Mind Matters in tech fest Sankalan -2009
- Won 2nd Prize in Quiz in tech fest Vinculum conducted by IP College for Women Delhi University in 2009.
- Won 2nd Prize in C/C++ Coding Event Sprint in Sankalan-2010
- Got 2nd place in Dist in Bhartiya Sanskriti Gyan Pariksha
- Got 3rd Place in Dist in Bhartiya Pratibha Samman Samaroh

#### Other Activities

- Event Coordinator in technical quizzes namely Minds Matters for department technical festival Sankalan-2010.
- Event Coordinator in technical quiz namely Overnight Coding for department technical fest Sankalan-2010