




## Faculty Detail page on DU Web-site

Title	Prof./Dr./Mr./Ms./Mrs.	SUNIL	KUMAR	MUTTOO	Photograph
Designation		Associate Professor			
Address		Department of Computer science, University of Delhi. (505, Patel C G H S , Sector 4, Plot 4, Dwarka , New delhi-110075.)			
Phone No	Office	27667591			
	Residence				
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Web-Page					
Educational Qualifications					
Degree		Institution		Year	
Ph.D.		Delhi University		1982	
M.Phil.		Delhi University		1978	
M.Sc.		Delhi University		1976	
B.Sc.		Delhi University		1974	
M.Tech.		IIT KHARAGPUR		1990	
Career Profile					
<ol style="list-style-type: none"> <li>1. 30<sup>th</sup> August, 1991 – till date: Associate Professor, University of Delhi, 28<sup>th</sup> July, 1982 to 30<sup>th</sup> August, 1991 Lecturer, Sr. Lecturer in Mathematics ,S.G.T.B. Khalsa College University of Delhi, Delhi. 20<sup>th</sup> October, 1978 to 28th July, 1982 Lecturer, in Mathematics in various colleges of Delhi University.</li> <li>2. Examiner of Ph. D., M.Tech. thesis of JNU Delhi, IIT Delhi, Madras University, BRAU Agra.</li> <li>3. Member of UGC NET Committees, 2015,2016</li> </ol>					
Administrative Assignments					
<p><b>Head of the Department :</b> i. 1999 to 2002, ii. Since 30<sup>th</sup> October, 2013</p>					
Areas of Interest / Specialization					
Information Security					
Subjects Taught					
<p>Information Security, Special topics in Information Security. Computer Graphics,</p>					
Research Guidance					

1. <i>Supervision of awarded Doctoral Thesis</i>	4
2. <i>Doctoral Thesis submitted</i>	2
3. <i>No of students registered</i>	6

#### Publications Profile

##### PUBLISHED IN PEER REVIEWED JOURNALS(Since 2005)

1. Hans, H., Ahuja L. and Muttoo, S.K. (2016) 'A Fuzzy Logic Approach for Detecting Redirection Spam', Int. J. Electronic Security and Digital Forensics, Vol. 8 , No. 3,,191-204.
2. Bansal A., Muttoo S. K., Kumar V. (2016), "Secure Data Hiding Along Randomly Selected Closed Knight Tour", International Journal of Applied Security Research, Taylor & Francis, vol. 11 no. 1, pp. 90-100.
3. Bansal A, Muttoo S. K., Kumar V., (2015), "Secure Data hiding by optimal placement of Queen along closed knight tour", I-manager's Journal of Information Technology, Vol. 4, no. 3, pp. 18-24
4. Sunil Kumar Muttoo, Kumar Vinay. Bansal Abhishek" Steganography using solution of 8 queen's problem" International Journal of Signal Processing, Image Processing and Pattern Recognition Vol.7, No.5 , pp.47-58, 2014.
5. Bhavya Ahuja, S.K. Muttoo, Deepika Aggarwal,"Analysis of effect of varying quantization level on the image communication scheme based on combination of compression, cryptography and steganography", International Journal of Enhanced Research in Management & Computer Applications, Vol. 3 Issue 2, pp: (30-36), 2014.
6. MK Bhatia, SK Muttoo, MPS Bhatia Secure Requirement Prioritized Grid Scheduling Model International Journal of Network Security 15 (6), 478-483 2013.
7. S Kumar, SK Muttoo Image Steganography Based on Complex Double Dual Tree Wavelet Transform. International Journal of Computer & Electrical Engineering 5 (2) 2013.
8. S Kumar, SK Muttoo A comparative study of image steganography in wavelet domain International Journal of Computer Science and Mobile Computing, IJCSMC Issue 2 2013.
9. M Bhatia, SK Muttoo, MPS Bhatia Secure Group Communication with Hidden Group Key Information Security Journal: A Global Perspective 22 (1), 21-34 2013.
10. SK Muttoo Data Security Mass Communicator: International Journal of Communication Studies,7(1),39-40 , 2013.
11. S Kumar, SK Muttoo Image Steganography Based on Wavelet Families International Journal of Electronic Security and Digital Forensics 5 2013.
12. V Gaur, A Soni, SK Muttoo, N Jain "Comparative analysis of Mamdani and Sugeno inference systems for evaluating inter-agent dependency requirements" J Comput Eng Inf Technol 2, 2013.
13. SK Muttoo Abdul Satar A NEW STEGO-SYSTEM BASED ON LFSR GENERATOR International Journal of Engineering and Innovative Technology (IJEIT), Vol. 1 Issue 1. 2012.

14. Kumar, Vinay, Muttoo, S.K., Bansal Abhishek 'Hiding Information in Vector Layer while Extracting Layer from Raster Data 'Information Security Journal: A Global Perspective' Vol. 21, Issue 6, 2012.
15. Kumar, V. and Muttoo, S.K., 'A Graph Theoretic Approach to Sustainable Steganography', Int. J. of Taiwan, Vol.17, No.1. 2011.
16. Sushil Kumar and S.K. Muttoo "Steganography based on Counterlet Transform", Bharti Vidyapeeth International Journal of Information Technology. Vol. 9 No. 6, June 2011.
- 17 S.K. Muttoo and Sushil Kumar,"A multilayered secure, robust and high capacity image steganographic algorithm" World Computer science and IT Jr. Vol. No.,pp 2011.
18. Muttoo, S.K. and Kumar, V., 'Hamiltonian Graph Approach to Steganography'. International Journal of Electronic Security and Digital Forensic, Inderscience, Vol.3, No.4, pp 311–332 2010
19. Muttoo, S. K. and Kumar, V., 'Hiding Message in Map along pre Hamiltonian Path'. Int.J. information Security and Privacy, Idea Group USA, Vol.4, No.4,pp.21-34. (2010).
20. Kumar, V. and Muttoo, S.K.,(2010), 'Graph Theoretic Approach to Steganography to Secure Message Digest'. Information Security Journal: A global perspective, Taylor & Francis, Vol.19, No.6, pp.328-335.
21. Kumar, V. and Muttoo, S.K.,(2009), 'Principle of Graph Theoretic Approach to Digital Steganography'. Proceedings of the Third INDIACOM National Conference, February, New Delhi, pp.161-165.
22. Kumar, V. and Muttoo, S.K.,(2008), 'Relevance of Steganography' in General, and Graph Theoretic Approach in particular, in Indian Security Concern and Measure'. Proceedings' of the Second INDIACOM National Conference, February, New Delhi, pp.183-188.
23. Vinay Kumar and S K Muttoo 'A data structure for graph To facilitate hiding of information in a graph's segments—a graph theoretic approach to steganography' Int. J. Communication Networks and Distributed Systems, Vol. 3, No. 3, pp 268-282, 2009.
24. S.K. Muttoo and Sushil Kumar, 'Robust Source coding Steganographic technique using Wavelet transforms', Bharti Vidyapeeth International Journal of Information Technology. Vol. 1 No. 2, July 2009.
25. S.K. Muttoo and Sushil Kumar, 'Data hiding in JPEG images' International Journal of Information Technology (IJIT), Vol 1, pp- 13-16, 2009.
25. S.K.Pal, P.K.Saxena and S.K.Muttoo 'Designing Secure & Survivable Stegosystems', Defence Science Journal, Vol. 56, No.-2, April 2006, pp. 239-250.
26. S.K.Pal, P.K.Saxena and S.K.Muttoo, 'Steganography & Watermarking of Digital Images Using Singular Value Decomposition', Journal of Discrete Mathematical Sciences and Cryptography, Vol. 8, No.3, December 2005, pp. 343-353.

Conference Organization/ Presentations (in the last three years)

1. R Gupta, SK Muttoo, SK Pal "Proposal for Integrated System Architecture in Utilities" 3rd International Conference on Advances in Computing, Communications and Informatics,

<p>IEEE- Explore ,pp 1995-1998, 2014.</p> <p>2. Rajan Gupta, S.K. Muttoo, S.K. Pal “Awareness, Adoption and Acceptance of e-Government Services in India” Proceedings of International Conference on Research in Marketing (ICRM 2013) -A Refereed International Conference, ICRM-PS2/1-11, Published by IIT D, XLRI, Curtin University (ISBN 9781630419981), 2013. Rajan Gupta, S.K. Muttoo, S.K. Pal, “Analysis of Information Systems Security for e-Governance in India” Proceedings of National Workshop on Cryptology, TSII17- 25, Publisher: DESIDOC, DRDO and CRSI ,2013</p> <p>3. S Verma, SK Pal, SK Muttoo “ A new tool for lightweight ` encryption on android “ Advance Computing Conference (IACC), 2014 IEEE International, 306-311, 2014</p> <p>4. M Bhatia, SK Muttoo, MPS Bhatia” Steganography-Based Secure Communication Proceedings of the Second International Conference on Soft Computing 2014</p> <p>5. Sushil Kumar and S.K. Muttoo, “An Overview on Wavelet-like Transforms in Image Data Hiding”, Proceeding of the National Conference on computing for Nation Development, 2010, New Delhi, Feb. 25-.26, pp. 263-268</p> <p>6. Sushil Kumar and S.K. Muttoo, “Data Hiding techniques based on Wavelet-like Transform and Complex Wavelet Transform”, International Symposium on Intelligence Information Processing and Trusted Computing, IPTC 2010, Huanggang, China, Oct. 28-29, 2010, published in IEEE Xplore</p> <p>7. Sushil Kumar and S.K. Muttoo, “Image Steganography based on Complex Double Dual Tree Wavelet Transform”, 3rd International Conference on Signal Acquisition and Processing (ICSAP 2011), Singapore, Feb.26-28, 2011</p> <p>8. Sushil Kumar and S.K. Muttoo, “Steganography based on Contourlet Transform”, International Journal of Computer Science and Information Security (<i>IJCSIS</i>), Vol. 9 o. 6, June 2011</p> <p>9. Sushil Kumar and S.K. Muttoo , “Image steganography based on Complex Wavelet Transform”, 2<sup>nd</sup> National Conference on Software Engineering and Information Security (NCSEIS10), Acropolis Institute of Technology and Research, Indore, India, 23-24 December, 2010, IEEE Computer Society sponsored, pp.147-151.</p>
<p><b>Research Projects (Major Grants/Research Collaboration)</b></p> <p>VC ‘s Research Grant 2007-08 to 2014-15, 2015-16.</p>
<p><b>Awards and Distinctions</b></p> <p>Recipient of</p> <ul style="list-style-type: none"> <li>(i) ISRO Research Fellowship for Ph. D.</li> <li>(ii) Minor Research Grant from UGC</li> <li>(iii) Cross Migration Scheme Fellowship for M.Tech.</li> </ul>
<p><b>Association With Professional Bodies</b></p>

Life member of Computer Society of India  
Life member of Cryptographic Society of India  
Member of ACM

**Other Activities**

Convener - CBCS committee for Computer Science, 2015  
Member of Academic Council, University of Delhi, 2016  
Member of University Court, University of Delhi, 2016