

CENTRAL UNIVERSITY OF JAMMU

FACULTY PROFILE PERFORMA

Name	Arun Kumar Sharma	
Title & Designation	Assistant Professor, Department of Computer Science & Engineering, Central University of Jammu. Rahya-Suchani (Bagla), District Samba, Pincode - 181 143, Jammu & Kashmir (J&K), India	
Residence Address	House No. – 51, Roura Sector – 2, Bilsapur, Himachal Pradesh, 174001	
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Educational Qualifications:		
Degree	Institution	Year
Ph. D.	Panjab University, Chandigarh	Pursuing
M. Tech	National Institute of Technology (NIT), Hamirpur H.P.	2019
B. Tech	National Institute of Technology (NIT), Hamirpur H.P.	2018
NET + JRF	Qualified	2020
GATE	Qualified	2018
Areas of Interest / Specialization:		
Wireless Sensor Networks, Cognitive Radio Networks, Machine Learning, Deep Learning, Cryptography.		
Subjects Taught:		
<ul style="list-style-type: none">• Analysis and Design of Algorithms• Object Oriented Programming using C++• Programming in Python• Theory of Computation• Operating Systems		

Projects and Experience:	
1.	Worked on a project entitled “ Maximum Clique Enumeration ”, under the guidance of Dr. Debajyoti Behra, IIIT Delhi . (July 2015)
2.	Worked on a project “ Movie Recommender System ”, under the guidance of Dr. Pardeep Singh, NIT Hamirpur . (2017-2018)
3.	Worked on dissertation “ Hypergraph Theory based Channel Assignment in Cognitive Radio Networks ”, under the guidance of Dr. Nitin Gupta, Assistant Professor, NIT Hamirpur . (2018-2019)

Conferences/Workshops :

1. Attended 15th International Conference on **Cryptology, INDOCRYPT-2014** at New Delhi, India (14-17 December, 2014).
2. Attended 5 days National Instructional Workshop on Cryptology, NIWC-2015 at Himachal Pradesh University Shimla, H. P., India (18th -22nd May, 2015).
3. Attended Summer School on **Design and Analysis of Efficient Computer Algorithms and its Application**, at NIIT University, Neemrana, Rajasthan, India (30th June – 5th July, 2015).
4. Attended 6th International Conference on **Security, Privacy and Applied Cryptographic Engineering, (SPACE, 2016)**, at C. R. Rao Advanced Institute of Mathematics, Statistics and Computer Science, Hyderabad, India (14th – 18th December, 2016).
5. Presented Paper entitled “**COMPARATIVE ANALYSIS OF GRAPHICAL TECHNIQUES FOR RESOURCE ALLOCATION IN D2D UNDERLAY COMMUNICATION**” in **CHASCON 2022** at Panjab University, Chandigarh.

Publications Profile:**• Research Papers in Journals**

1. Arun Kumar Sharma, Sonal Chawla, “Hypergraph based Resource Allocation in D2D communication for Hexagonal based Cellular Network”, International Journal of Software Science and Computational Intelligence (IJSSCI), IGI GLOBAL [Accepted] **[ESCI INDEXED]**
2. P. L. Sharma, Ashima & Arun Kumar Sharma (2022) Recursive construction of normal polynomials over finite fields, Journal of Discrete Mathematical Sciences and Cryptography, 25:8, 2645-2660, DOI: 10.1080/09720529.2021.1897215 **[SCOPUS INDEXED]**
3. Channi, H. K., Sharma, K. K., Monga, H., Sharma, N., & Sharma, A. K. (2021), “Role and Importance of Creative Thinking in Everyday Life”, *Wesleyan Journal of Research*, 14(2): 189-194. **[UGC APPROVED]**.
4. Channi, H. K., Sharma, K. K., Monga, H., Sharma, N., & Sharma, A. K. (2021), “A REVIEW ON DISTRIBUTION SYSTEM STATE ESTIMATION”, *Wesleyan Journal of Research*, 14(2): 179-188. **[UGC APPROVED]**.
5. Channi, Harpreet & Kamal, Kant & Sharma, & Sharma, Nitin & Sharma, Arun. (2021). “A REVIEW ON SMART GRID TELECOMMUNICATION SYSTEM”, 55. 185-192. **[UGC APPROVED]**.
6. Channi, Harpreet & Kamal, Kant & Sharma, & Sharma, Nitin & Sharma, Arun. (2021). “AN OVERVIEW OF HYBRID ELECTRIC VEHICLE MOTOR DRIVES”, 55. 193-199. **[UGC APPROVED]**.
7. Channi, Harpreet & Kamal, Kant & Sharma, & Sharma, Nitin & Sharma, Arun. (2021). “DESIGN AND DEPLOYMENT OF SECURED AND COST-EFFECTIVE NETWORKING MODEL FOR ORGANIZATION”, 55. 200-208. **[UGC APPROVED]**.
8. Monga, H., Sharma, K. K., Channi, H. K., Sharma, N., & Sharma, A. K. (2021), “MULTI VARIABLE APPROACH OF BUILDING MANUFACTURING AND USE IN ECO FRIENDLY PERSPECTIVE”, *Wesleyan Journal of Research*, 14(2): 322-331. **[UGC APPROVED]**.
9. Sharma, A. K., & Badoga, N. K. (2020). Digital Signatures Using RSA Public Key Cryptosystem Scheme. *International Journal of Theoretical & Applied Sciences (IJTAS)*, 12(1):37-42.
10. Sharma, A. K., & Badoga, N. K. (2020). Data Encryption Standard Algorithm in Symmetric Key Cryptography over Finite Field F_2 . *International Journal on Emerging Technologies (IJET)*, 11(5):705-712.
11. P. L. Sharma, Arun Kumar, Arun Kumar Sharma (2020) On the characteristic roots and heart of a class of rhotrices over a finite field $*$. *Bulletin of Pure & Applied Sciences- Mathematics and Statistics*, 39(2), 277–288. <https://doi.org/10.48165/>
12. Sharma, A. K., & Badoga, N. K. (2020). Elliptic Curve Cryptography Involving Two Private Keys and Pubic Keys. *International Journal of Electrical, Electronics and Computer Engineering (IJEECE)*, 9(1&2): 12-19.
13. Sharma, A. K. (2019). Safety Application in Android. *International Journal on Emerging Technologies (IJET)*, 10(1):234-238.
14. Sharma, A. K. (2019). Design and Mathematical Structure of Cryptographic Hash Function SHA-512. *International Journal of Theoretical & Applied Sciences (IJTAS)*, 11(2):41-47.
15. Sharma, A. K. (2018). Content-Based Filtering in Movie Recommendation. *International Journal of Electrical, Electronics and Computer Engineering (IJEECE)*, 7(2):106-109.