Dr. SUPRIYA KHAITAN CHANDRA

Email id supriya.khaitan@bvucoep.edu.in

Total Years of Experience -20+ years

Qualification

- UGC NET Qualified in Year 2016

Academic Education

- Ph.D CSE, Galgotias University, January 2024.
- Post-Graduation, M.Tech(IT) from Gurugobind singh Indraprastha University (GGSIPU), Delhi in 2010 with Distinction.
- Graduation, B.Tech(CSE) from SSIET Derabassi, Punjab Technical University (PTU) in 2003.

Research

Patent Grant

- Indian Patent: 349189-001, "Virtual Reality Headset", September 2022.
- Indian Patent 403014-001, "AI based Device for Monitoring Patient Health" 2024

Patents Published

- Indian Patent 202011004322, "System and Method for Cryptography Using Chaotic Tent Map and Improved Salp" Page 25, 14 February 2020.
- Indian Patent 202011004491, "System and Method for Smart/Intelligent IoT Based Irrigation Management" Page 27, 14 February 2020.
- Indian Patent 202011004730, "System and Method for High Efficiency Coding for Surveillance Videos Based on Selective Based Fast Intra Coding" Page 34, 14 February 2020.
- Indian Patent 202011004322, "System and Method for Medication Management", March 2020.
- Indian Patent, 202011018854 "System and Method for Detecting a Potential Vehicle Collision and Providing Alert" 19, June 2020.
- Indian Patent, 202011020476, "System and Method to Control Devices Through Mental Activities" 26, June 2020.
- Indian Patent 202031041923, "Novel IoT Based Disinfectant Sanitizer Tunnel Against Covid-19 Using Human Detecting Sensors and End-To-End Security Model"
- Indian Patent 202011046482 - System and Method for IoT Based Smart Garage Management, 6, November 2020.
- Indian Patent 202011047571," Systems and Methods for IoT Enabled Detection of Leakage in Gas Distribution Pipe Network", 13, November 2020.
- Indian Patent 202111006203, "System and Method for Using Data Science to Analyse Instant Messengers Data", February 2021.
- Indian Patent 202321088544, "Scalable Deep Learning Framework for Wearable Health Monitoring Devices", 2023
- Indian Patent 403014-001, "Ai Based Device for Monitoring Patient Health" 2023

Copyright

- Deep Learning Supercharges Wearables for Personalized Health Insights - Future-Proofing Your Health, 2023.

International Journals (SCI)

- An application for the earthquake spectral and source parameters and prediction using adaptive neuro fuzzy

inference system and machine learning. Journal of Intelligent & Fuzzy Systems (2023) pp no: 1-16. 10.3233/JIFS-224423.

- Chaos cryptosystem with optimal key selection for image encryption. Multimedia Tools Applications (2022). https://doi.org/10.1007/s11042-022-13535-2
- "A smart intuitionistic fuzzy-based framework for round-robin short-term scheduler" Journal of Supercomputing 78, 4655–4679 (2022).
- "Hybrid and Dynamic Clustering Based Data Aggregation and Routing for Wireless Sensor Networks" Journal of Intelligent & Fuzzy Systems, vol. 40, no. 6, pp. 10751-10765, 2021
- "Classification of Imbalanced Medical Data: An Empirical Study of Machine Learning Approaches", Journal of Intelligent & Fuzzy Systems, vol. 43, no. 2, pp. 1933-1946, 2022
- "Fault Aware Intelligent Resource Allocation Using Big Bang-Big Crunch Trained Neural Network for Cloud Infrastructure' Journal of Intelligent & Fuzzy Systems, vol. 43, no. 2, pp. 1947-1957, 2022.

International Journals (SCOPUS)

- "A One-Dimensional superior logistic map-based image encryption", International Journal of Internet and Protocol Technology, Inderscience Publisher, 2022, pp 226-235https://doi.org/10.1504/IJIPT.2022.125964
- "Chaos based image encryption using 3-Dimension logistic map", Materials Today Proceedings, 2021, https://doi.org/10.1016/j.matpr.2021.05.251
- "Statistical Investigation of Novel Corona Virus COVID -19", International Journal of Control and Automation Vol. 13, No. 2s, pp. 01-06, 2020.
- "A novel approach for Secure communication using logistic map" International Journal of recent advancements in management, science, technology, Education and legal issues 2019.

International Journals

- "Plant disease detection using CNN" Turkish Journal of Computer and Mathematics Education, Volume 12(12),2106-2112, 2021.
- "Public Key Cryptosystem Based on Optimized Chaos-Based Image Encryption", Journal of Computational and Theoretical Nanoscience's. Vol.17, pp. 5217–5223, 2020, https://doi.org/10.1166/jctn.2020.9411
- "Block Chain and its Application in Electronic Health Records" International Journal of Research in Engineering, Science and Management, ISSN: 2581-5792, Volume-2, Issue-3, March-2019, pp no. 137-139
- "Image Compression using Hybrid (DCT + DWT) Technique – A comparative study" International journal on recent and innovation trends in computing and communication, (ISSN:2321-8169), Vol.4 Issue 05, May 2016 pp no:105-111.
- "High Speed VPN Using Enhanced AES Algorithm" International Journal of Engineering Research & Technology, (ISSN: 2278-0181), Vol. 4 Issue 03, March-2015 ppno: 744-746
- "Faster conversion and security issues in MPLS networks" The International Journal of Science & Technoledge (ISSN 2321 – 919X), Volume-2, Issue-12, Novemberr-2014 pp no:255-260.
- "Finding optimal attack Path using attack Graphs: A survey" in International Journal of Soft computing and engineering ISSN:2231-2307, Volume-1, Issue-3, July 2011 pp no: 33-36.

Book Chapter (SCOPUS)

- "Security of IOT in health care", Securing IoT and Big Data: Next Generation Intelligence" by CRC Press – Taylor and Francis Group, Chapter 15, pp: 307-330.
- "Plant Disease Detection using deep learning techniques" Handbook of deep learning in Biomedical Engineering, Elsevier, Chapter 8, pp: 219-245
- " Intelligent Agents", Distributed Artificial Intelligence: A Modern Approach, by CRC Press – Taylor and Francis Group, Chapter 2, pp:20-45.
- "Early detection of Alzimer using deep learning" Evolving role of AI and IoMT in healthcare Market, Springer, Chapter 5. (Accepted for publication).
- "Data visualization using machine learning for efficient tracking of pandemic – COVID-19" Blockchain and machine learning for e-healthcare systems by CRC Press – Taylor and Francis, Chapter 17, pp :417-441.
- "IoT for Smart Health Care Monitoring System", Blockchain and IoT Integration Approaches and Applications, CRC Press – Taylor and Francis, Chapter 11.

International Conferences (SCOPUS)

- "A Comparison of Genetic Algorithm Operators for the Seat Allocation Problem", 4th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N) (2022) 148-155.
- "Multi-Fractal Image compression" International Conference of Machine Learning, Big Data, Cloud or parallel computing trends perspective and prospects (Com-IT-Con), IEEE Conference number 45641, 2019.
- "Application of Block Chain in EHRS For Maintaining the Privacy of Patients Record "Advances in Electromechanical Technologies: Proceedings of TEMT 2019, Lecture Notes in Mechanical Engineering, 2019.

International Conferences

- "Secure Authentication system using two factor authentication techniques" in international conference at IMT Ghazibad, ICDM-2008.
- "Keystroke dynamics-based password authentication scheme" in international conference at PDM-Bahadurgarh New Delhi, ICIT-2009
- "Two factor authentications based on keystroke dynamics" in international conference at PCTE Ludhiana, DCIT-2009.

Short Term Courses/Workshop/FDP/Seminars Attended/MOOC

- STTP, "Applied Data Science" , 2023.
- Faculty Enablement Programme "Python Programming through INFYTQ Platform", 2020. (Scored A+ Grade)
- "LaTex, Python and R Programming", GNIT, 2020.
- "Advances in Computational Intelligence & Machine Learning Applications", Amity University, 2020.
- "Industry Led Training on Amazon Web Services (AWS)" RMK Engineering College, 2020.
- "CO PO Attainment and Computation and Outcome Analysis", Inpods, 2020.
- "Data Visualization", IET Teachers Association, 2020.
- "Art of Writing Research Article and Funding Proposal" IEEE, 2020
- "Wireless Charging Autonomous Electrified Micro mobility device", PDH, IEEE, 2020
- "Data Science Using Python", ICT Academy, 2020
- "Big Data Analytics" IBM 2018.
- "Business Process Management ", IBM, 2017
- "Data warehouse and Multidimensional Modelling", IBM, 2017
- "Business Intelligence", IBM, 2017
- "Data Mining and Predictive Modeling" IBM, 2017.
- "Open-source system and open software" IBM, 2016.
- "Introduction to computer science and programming using Python." Edx (MOOC), 2016.
- "Introduction to Linux" Edx (MOOC), 2016.
- "Introduction to Cloud Computing." Edx (MOOC), 2015.
- "Introduction to Real time systems." IEEE on Edx (MOOC), 2015.
- "Linux Administration" from NITTR Chandigarh, 2008.
- "Digital systems design using VHDL" from NITTR Chandigarh, 2008.
- Paper presented on "360-degree feedback appraisal system in academic institutions" at National seminar organized by Alfla engineering college, Haryana in year 2008.
- Attended a National Seminar on "Network security" at Jamia Millia Islamia, 2008.
- "Faculty Development Programme" from LIMAT, Faridabad, 2007.

Google Scholar Profile: https://scholar.google.com/citations?user=kzxJdH4AAAAJ
Scopus Profile: https://www.scopus.com/authid/detail.uri?authorId=57211295254
Web of Science Profile Research ID:
https://www.webofscience.com/wos/author/record/AAZ-4797-2021
OrcID: https://orcid.org/0000-0002-3963-9536