Dr. L K SURESH KUMAR

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ScopusID: 58312209400   **Vidwan-ID:** 594122   **GoogleScholar:** m4TH-X8AAAAJ   **ORCID:** 0009-0000-7190-1701

EDUCATION

Doctor of Philosophy | *Network Security*   Sep 2022
Title: Security Framework for Wireless Sensor Networks
Osmania University, Hyderabad, Telangana

Master of Engineering | *Computer Science & Engineering*   Jun 1991
Birla Institute of Technology & Science, Pilani, Rajasthan

Bachelor of Engineering | *Computer Science & Engineering*   Jun 1989
Osmania University, Hyderabad, Telangana

WORK EXPERIENCE AT OSMANIA UNIVERSITY, HYDERABAD

Associate Professor   25 Nov 2006 – Till Date

Assistant Professor (Selection Grade)   27 Sep 2000

Assistant Professor (Senior Grade)   27 Sep 1996

Assistant Professor   04 Oct 1991

PROJECTS AND RESEARCH

Security in Mobile Ad hoc networks | *UGC Minor Project*   2008- 2014
Funding Agency UGC - Grant Fund in Rupees 3.8 lakhs - COMPLETED

DESIGN PATENT GRANTED

Block Chain Enabled Device For Network Security   28 November 2023
Granted by Government of UK

HONORS AND AWARDS

Jyesta Acharya Award   2021 - 2022
Recognizing Exemplary Contribution of Research & Education Sector
by Bharat Education Excellence Awards Brain O Vision

CORPORATE/ADMINISTRATIVE EXPERIENCE

Chairperson, Board of Studies in (Informatics)   2023-Till Date
University College of Engineering , Hyderabad

Chairperson, Board of Studies in (Computer Science & Engineering)   2022-Till Date
University College of Engineering , Hyderabad

Director, Central Computing Center   2010-2012
University College of Engineering , Hyderabad

Co-convener, MCA CET 2000
Osmania University, Hyderabad

ORIENTATION , REFRESHER ,SHORT TERM COURSES ATTENDED

QIP short term course on Intelligent informatics Conducted by IITK, Kanpur 15-19 July 2013
OU, 7 Days

MEMBERSHIPS IN PROFESSIONAL/SCIENTIFIC BODIES

1. Life Member - The Institution of Electronics and Telecommunication Engineers(IETE)

BOOKS

Book Chapters

1. **L K Suresh Kumar** et. al. (2024). "Lung Cancer classification – CNN model integrated with strategies for Handling class Imbalanced Data," Sustainability in Industry 5.0: Theory and Applications. Published February 19, 2024 by CRC Press.

Books

1. "Data communication and computer networks", Distance Education, PGRRCDE, Sem-III, Paper- II, Editor, 2023
2. "Data communication and computer networks", Distance Education, PGRRCDE, Author, 2015

PUBLICATIONS

2025

1. L K Suresh Kumar et. al. "Inculcated feature selection process using INBPOA for DDoS Detection and classification," Proceedings of the International Conference on Cognitive and Intelligent Computing(ICCIC'23) Springer Nature Singapore, Feb 2025, Volume 2, pp. 241–249
DOI: https://doi.org/10.1007/978-981-97-9266-5_24

2024

1. Dr. L. K Suresh Kumar, "Clustered Based Technological And Organizational Aspects Of Mobile Device Management And Their Security Concerns", The Bioscan, vol. 19, no. Special Issue-1, pp. 722–728, Dec. 2024. Paper Link https://thebioscan.com/index.php/pub/article/view /2817
2. Zoha Fatima, Dr. Syed Asadullah Hussaini, and Dr.L.K Suresh Kumar, "Optimize Emergency Medication Decisions Through Random Forest Adaptive Decision Support System For A Personalized Drug Recommendation Framework", The Bioscan, vol. 19, no. Special Issue-1, pp. 707–713, Dec. 2024. Paper Link: https://thebioscan.com/index.php/pub/article/view /2815
3. Rahma Bamasdoos, Dr. Mohammed Jameel Hashmi, and Dr.L.K Suresh Kumar, "A New Framework In Credit Allocation: Blockchain And Kyc Integration", The Bioscan, vol. 19, no. Special Issue-1, pp. 714–721, Dec. 2024. Paper Link: https://thebioscan.com/index.php/pub/article/view /2816
4. Arun Kumar Silivery, Kovvur Ram Mohan Rao and L.K Suresh Kumar "Rap-Densenet Framwork for Network Attack Detection and Classification" Journal of Information & Knowledge Management, Volume 23, Year 2024, Pages 2450033 Paper Link https://doi.org/10.1142/S0219649224500333
5. Dr. L. K. Suresh Kumar, Dr. D. Eshwar, "Artificial Intelligence to Mitigate SQL Injection Attacks for Enhancing Web Application Security", Volume IX Issue, April 2024 www.zkginternational.com ISSN:2366-131 Paper Link

6. L. K. Suresh Kumar and D. Eshwar, "Optimizing IoT Healthcare Security with Advanced Hybrid Encryption and Data Embedding Techniques", HOM, vol. 10, no. 1, Feb. 2024
Paper Link: https://historymedjournal.com/HOM/index.php/medicine/article/view/717

7. Bhaskar, LK Suresh Kumar, MV Ramana Murthy, "Machine Learning Algorithm Using Random Forest Algorithm for Data Analysis",Journal of Tehnology, Vol 12 Issue 9, 2024.
Paper Link: https://journaloftechnology.org/volume-12-issue-9-2024

2023

1. Arun Kumar Silivery, Ram Mohan Rao Kovvur, Ramana Solleti, LK Suresh Kumar, Bhukya Madhu, "A model for multi-attack classification to improve intrusion detection performance using deep learning approaches", Measurement: Sensors, Volume 30, Dec 2023, 100924, ISSN 2665-9174 Paper Link: https://doi.org/10.1016/j.measen.2023.100924

2. S. Rakesh, Nagaratna P. Hegde, M. Venu Gopalachari, D. Jayaram, Bhukya Madhu, Mohd Abdul Hameed, Ramdas Vankdothu, L.K. Suresh Kumar, "Moving object detection using modified GMM based background subtraction",Measurement: Sensors, Volume 30, Dec 2023,100898,ISSN 2665-9174 Paper Link: https://doi.org/10.1016/j.measen.2023.100898

3. Syed Mohammed Furqan Ishaqui, Dr. Mohd.Abdul Bari, Dr..L.K Suresh Kumar, "Automated Summarization of Bug Reports to Speedup Software Development/Maintenance Process by Using Natural Language Processing (NLP)", Journal of Chemical Health Risks, ISSN:2251-6727,Vol .13.Issue -3, September -2023 Paper Link: https://jchr.org/index.php/JCHR/article/view/670

4. Rahma Bamasdoos, Dr. Mohammed Abdul Bari, Dr. Suresh Kumar ," Using Artificial Intelligence What Causes Sentimental Analysis On Social Media", International Journal of Multidisciplinary Engineering in Current Research – IJMEC, ISSN: 2456-4265, Volume 8, Issue 9, September-2023,Page Number:37-49 Paper Link: https://ijmec.com/index.php/multidisciplinary/arti cle/view/313

5. Arun K. Silivery, Kovvur Ram Mohan Rao, and L. K. Suresh Kumar, "An Effective Deep Learning Based Multi-Class Classification of DoS and DDoS Attack Detection", IJECES, vol. 14, no. 4, pp. 421-431, Apr. 2023. Paper Link: https://doi.org/10.32985/ijeces.14.4.6

6. Trumala Haipriya, Vasundhara, Suresh Kumar LK, Sudershananrao, MV Ramana Murthy, "Data Management and Storage System Mathematical Modelling and Equation", doi:10.1117/12.2675871 Paper Link: https://doi.org/10.1117/12.2675871

2022

1. Raheela Tabassum , Dr. Mohd.Abdul Bari , Dr.L.K Suresh Kumar ," Decentralized Application For Secure Messaging In A Trustless Environment", International Journal For Advanced Researchs In Science Technology, (IJARST), ISSSN NO: 2457- 0362,Vol 12,Issue 10, Page 88,Oct 2022 Paper Link:

2. L. K Suresh Kumar," The Influence of Dynamic Coupling on Object-Oriented Software and Its Implementation", IJFANS , ISSN PRINT 2319 1775 Online 2320 7876, Volume 11, Issue - 12 (2022) Paper Link:

3. L. K Suresh Kumar," Impact analysis in object-oriented systems for Dynamic Coupling Measures", IJFANS , ISSN PRINT 2319 1775 Online 2320 7876, Volume 11, Issue - 10 (2022) Paper Link

2021

1. L. K. S . Kumar, "An Efficient Network Intrusion Detection Model Combining CNN and BiLSTM", CIBG, vol. 27, no. 6, pp. 1782–1801, Dec. 2021 Paper Link: https://cibgp.com/au/index.php/1323-6903/article/ view/2273

2. L K. S. Kumar, "Intrusion Detection System through ID3-PCA-BP", CIBG, vol. 27, no. 6, pp. 1802–1821, Dec. 2021. Paper Link: https://cibgp.com/au/index.php/1323-6903/article/ view/2274

3. L K SureshKumar, KV ChalapatiRao, Gopal Kaul," Secure Communications for WSN",NATIONAL CONFERENCE ON RECENT TRENDS IN COMPUTATIONAL INTELLIGENCE & INFORMATICS", 2021

2020

1. L K Suresh Kumar , "Ensemble technique based intrusion detection system", Vol. 11 No. 3 (2020) Turkish Journal of Computer and Mathematics Education (TURCOMAT), 2020
Paper Link: https://turcomat.org/index.php/turkbilmat/article/ view/12912

2. L. K Suresh Kumar, Aleem MOHAMMED, "A Review on Machine Intelligence and Distribution of Big Data Computing over Cognitive Cloud and IoT Interfacing," Parishodh Journal, Volume IX, Issue II, February/2020 Paper Link: https://parishodhpu.com/index.php/february-2020 /

2019

1. L K Suresh Kumar "Intrusion detection based on deep learning techniques in computer networks", Vol. 10 No. 3 (2019) Turkish Journal of Computer and Mathematics Education (TURCOMAT), 2019
Paper Link: https://turcomat.org/index.php/turkbilmat/article/ view/12911

2. L K Suresh Kumar , "Designing an Efficient Intrusion Detection System Based on Feature Selection and Ensemble Classifier", VOL. 56 NO. 1 (2019): VOLUME 56 NO. 1 (2019), Psychology and education Journal, 2019 Paper Link: http://psychologyandeducation.net/pae/index.php/pae/article/view/7483

2018

1. Mbuu Mutua L. K. Suresh Kumar, "Credit card fraud detection: A hybrid approach", Website: ijetms.in Issue:1, Volume No.2, January 2018 https://ijetms.in/vol-2-issue-1/Vol-2-Issue-1-8.pdf

2. Mbuu Mutua, L. K. Suresh Kumar," Using Localized Encryption and Authentication Protocol (LEAP) to Prevent Injection of Malicious Nodes in a Wireless Sensor Network (WSN) ", INDIACom-2018 - International Conference on "Computing for Sustainable Global Development", 14 - 16 March, 2018, IEEE Conference ID: 42835 , 2018

3. Mbuu Mutua, L. K. Suresh Kumar, ," Credit Card Fraud Prevention for Financial Institutions: Use of Anomaly Detection Method", INDIACom-2018 - International Conference on "Computing for Sustainable Global Development", 14 - 16 March, 2018, IEEE Conference ID: 42835, ISSN 0973-7529; ISBN 978-93-80544-28- 1,2018

4. L K Suresh Kumar, Harshitha Rathod, Anjum Aswari, Niharika D," Comparative study of cluster based data aggregation protocols", International Conference on Trends in Engineering, Management, Pharmacy and Sciences, ISBN: 978-93- 87739-04-8, 2018

2017

1. LK Suresh Kumar, Harika Gumudavally, Sree Kavya Sanku," Comparative study of LEACH and EECDA protocols", IEEE International Conference on Power, Control, Signals and Instrumentation Engineering, IEEE-CATALOG NUMBER: 978-1-5386-0814-2, 21-22, September 2017, 2017 PaperLink

2. L.K.Suresh Kumar, Rashmi Kethireddy, K.V.T.N. Prashanth," A Survey on Algorithms Solving ECDLP (Elliptic Curve Discrete Log Problem) ",ICIOTSC-2017- International Conference on Internet of Things for Future Smart Cities , 21-22 July 2017, ISBN: 978-81-929580-4-0 , 2017 paperlink

3. L.K.Suresh Kumar, G.Raghu Ram," Extended Functions of ElGamal based Algebraic Homomorphism", INDIACom- 2017- International Conference on "Computing for Sustainable Global Development", 01st - 03rd March, 2017, IEEE Conference ID: 40353, ISSN 0973- 7529; ISBN 978-93-80544-24-3, 2017 PaperLink

2016

1. L.K. Suresh Kumar, Md Abdul Muqeeth, Perikala Chaitanya Fahd Furqan, , "Detailed Analysis of MAC Based and Level Based Routing Protocols in Wireless Sensor Network", National Conference on Computer Networks & Information Security, 2016
2. L.K. Suresh Kumar ," A Survey on Intrusion Detection Techniques in WSN ",NCCNIS-2016 , National Conference on Computer Networks & Information Security, Vasavi Engineering College, Hyderabad
3. L.K. Suresh Kumar ," Multi Keyed algorithm of ECC", NCCNIS-2016 , National Conference on Computer Networks & Information Security, Vasavi Engineering College, Hyderabad
4. L.K. Suresh Kumar ," A Survey on Homomorphic Encryption Schemes in WSN", NCCNIS-2016 , National Conference on Computer Networks & Information Security, Vasavi Engineering College, Hyderabad

2014

1. L K SureshKumar,Neha, " A Novel Approach in preventing Black hole Attack with Minimum Routing Overhead, "NCCNIS – 2014 - the 3rd National Conference on Computer Networks and Information Security,4 - 5 March, 2014, ISBN-978-93-82570-23-3

2013

1. L K SureshKumar, Neha," Analysis of Cooperative Black Hole Attack Using AODV Protocol", CONFLUENCE 2013 - 4th INTERNATIONAL CONFERENCE,: The Next Generation Information Technology Summit on the theme: Mega Trends of IT, 26th - 27th Sept. 2013

2012

1. RajyaLaxmi, L K SureshKumar, " Implementation of Distributed Key management scheme on Council based Clustering in MANET", CARCAN- 2012 - Current Trends in Atmospheric Research including Communication and Navigation Aspects", During 21 and 22 , December2012, ISBN 978-93-82570-04-2
2. Geeta, L K SureshKumar," An Optimum based Approach to Detect and Prevent Black Hole Attack in MANETS", ", CARCAN- 2012 - Current Trends in Atmospheric Research including Communication and Navigation Aspects", During 21 and 22 , December2012, ISBN 978-93-82570-04-2

2011

1. L K SureshKumar, Shyamala," Efficient backup routing scheme in AODV with Unidirectional links", INDICON 2011 - IEEE India council conference on -Engineering Sustainable Solutions, Print ISBN: 978-1- 4577-1110-7, INSPEC Accession Number: 12506665, DOI :10.1109/INDCON.2011.6139349

2010

1. L K SureshKumar, Santhoshkumar," A novel approach for the prediction of Attacks using Events Visualization", ICACCTHPA'10 - International Conference on Advanced Computing & Communication Technologies for High Performance Applications, 7-10 December 2010

2. L K SureshKumar, JayaBharathi, "Efficient AODV protocol in unidirectional MANETs", CCCA-SRIT - Communication, Computation, Control and Automation, 23 and 24, April 2010

3. L K SureshKumar, Manasa, " Power based routing to ensure reliable data transfer in MANETs", CCCA-SRIT - Communication, Computation, Control and Automation, 23 and 24, April 2010

2008

1. K. Shyamala, P. Ravibabu, **L K Suresh Kumar**, R. Reddy and S. Das, "Instruction prefetching using Basicblock prediction," 2008 International Conference on Electronic Design, Penang, Malaysia, 2008, pp. 1-4, doi: 10.1109/ICED.2008.4786750.

INVITED TALKS /LECTURES GIVEN

International level

- Talk on **Network Security** at Indo-Dutch Cybersecurity School on November 2nd, 2022
- Talk on **Cyber Security** at Indo-Dutch Cybersecurity School on October 22nd, 2021
- International College of Physical Sciences and Engineering, School of Computer Science & Informatics, Cardiff University, UK 19 June-24 June 2023.

National level

- FDP Talk on Data Communication and Networking at National Institute of Technical Teachers Training & Research, Hyderabad on 27-06-2019.
- FDP Talk on Computer hardware and Networking at National Institute of Technical Teachers Training & Research, Hyderabad on 14-02-2020.
- FDP Talk on Computer hardware and Networking at National Institute of Technical Teachers Training & Research, Hyderabad on 29-07-2023.
- ATAL FDP on Deep Learning Architectures at Stanley College of Engineering and Technology for Women, Hyderabad on 04-Nov-2024
- FDP on Generative AI at MJCET, Hyderabad on 06-Jan-2025

(Dr. L K Suresh Kumar)