

PROFILE

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| Name | Dr D Loganathan |
| Position & Affiliation | Professor, Department of ISE |
| Areas of Interest | Wireless Adhoc Networks, Wireless Networks, Cyber Security, Block Chain and Machine Learning. |
| Email | Loganathan.ise@cambridge.edu.in |
| LinkedIn ID | www.linkedin.com/in/dr-d-loganathan-m-e-ph-d-606aa342 |
| Google Scholar ID | https://scholar.google.com/citations?user=N3IDzeUAAAAJ&hl=en |
| Orchid ID | https://orcid.org/0000-0002-4520-8812 |
| Vidwan ID | https://vidwan.inflibnet.ac.in//profile/397246 |
| Scopus ID | https://www.scopus.com/authid/detail.uri?authorId=57196648577 |
| Professional Webpage (if any) | https://sites.google.com/view/dloganathanmorappur/home |

Educational Qualifications:

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| Ph.D., | Anna University, Chennai | India | 2014 |
| M.E., | Vinayaka Missions University, Salem | India | 2006 |
| B.E., | University of Madars, Chennai | India | 1994 |

Areas of Research:

Wireless Adhoc Networks, Cyber Security and Block Chain.

Brief Profile: (write about yourself)

I am Dr. D. Loganathan, a Professor in the Department of Information Science and Engineering (ISE), with a broad spectrum of academic interests, including Computer Networks, Wireless Networks, Data Communications, Data Structures and Algorithms, Cryptography and Network Security, Operating Systems, Distributed Systems, Mobile Computing, and Machine Learning. My academic journey began with a Bachelor's degree in Electronics and Communication Engineering from the University of Madras in April 1994. I later earned a Master's degree in Computer Science and Engineering from Vinayaka Missions University, Salem, in July 2006, followed by a Ph.D. from Anna University, Chennai, in October 2014. I bring over 28.6 years of teaching experience in engineering education and possess 10 years of post-doctoral research expertise.

As a passionate educator, I am dedicated to teaching with sincerity, adaptability, and a commitment to excellence under any circumstances. I consistently strive to enhance my knowledge and stay updated to deliver the best educational experience. My teaching philosophy focuses on mentoring students to develop decision-making skills, fostering their growth into well-rounded individuals and responsible members of society. I believe in engaging with students politely and empathetically, encouraging them to become not only skilled professionals but also compassionate individuals contributing positively to society. I take pride

in motivating students towards higher education and entrepreneurship. My contributions to academia include numerous research articles published in national and international journals. I am an active member of professional organizations such as IEEE (Senior Grade), ISTE, IAENG, CSTA, and IEOM. I have delivered numerous guest lectures, participated in workshops, organized Faculty Development Programs (FDPs), and actively engaged in seminars, national and international conferences, and symposiums. In my research endeavors,

I have published 45 research articles in reputed journals and presented eight papers at international conferences and four at national conferences. I am currently guiding a research scholar under VTU. Additionally, I have filed eleven patents and authored two textbooks. I have supervised over 100 student projects for both UG and PG levels and mentored 15 batches of engineering graduates, many of whom now work in prestigious MNCs and in government and private sectors.

Awards/Achievements/Others:

I was grateful to receive a funding of ₹60,000 from DST-NIMAT to organize an Entrepreneurship Development Program at MET’s School of Engineering, Mala, Thrissur, Kerala. Additionally, I successfully generated over ₹6 lakh through online examinations conducted at the same institution. My efforts in academia have been recognized with the “Best Faculty Award” at SVS College of Engineering, Coimbatore, Tamil Nadu.

Courses Taught:

Computer Fundamentals and Programming, Introduction to C Programming, Data Structures and Algorithms, Computer Networks, Operating Systems, Software Engineering and Project Management, Human-Computer Interaction, Professional Ethics, Research Methodology Computer Architecture and Organization, Compiler Design, Digital Data Communications, Wireless Communication, Web and Mobile Application Development, Artificial Intelligence and Machine Learning, Computer Graphics and Visualization, Computer Networks and Cryptography,

Publications/Patents:

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|---------------------|---|
| Publications | <p>Papers Published in International Journals</p> <ol style="list-style-type: none"> 1) Loganathan, D & Ramamoorthy, P 2012, ‘Multicast Routing Approach in Wireless Ad hoc Networks’, Journal of Computer Science, vol. 8, issue, 10, pp. 1739-1748. (Scopus Indexed) https://thescipub.com/abstract/jcssp.2012.1739.1748 2) Loganathan, D & Ramamoorthy, P 2012, ‘Modified AODV Routing Protocol with Multicast Parameters for Effective Communication in Wireless Ad hoc Networks’, IRACST – International Journal of Computer Networks and Wireless Communications, vol.2, no. 5, pp. 580-584. 3) Loganathan, D & Ramamoorthy, P 2012, ‘Enhanced DSR Protocol with Multicast Algorithm in Wireless Ad hoc Networks’, International Journal of Engineering Science and Technology, vol. 4, no. 08, pp. 3773- 3778. 4) Loganathan, D & Ramamoorthy, P 2012, ‘Multicast Energy-Interference Algorithm for Effective Transmission in Wireless Ad hoc Networks’, European Journal of Scientific Research, vol. 84, no. 4, pp. 572-586. SCI indexed/Web of science 5) Loganathan, D & Ramamoorthy, P 2013, ‘Energy Efficient Transmission through Multicast ZRP in Wireless Ad hoc Networks with Multicast Parameters’, Archives Des Sciences, vol. 66, no. 2, pp.171-182. 6) Loganathan, D & Ramamoorthy, P 2013, ‘Performance Analysis of Enhanced DSDV Protocol for Efficient Routing in Wireless Ad hoc Networks’, Research Inveny: International Journal of Engineering and Science, vol. 2, issue 10, pp. 01-08. |
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- 7) Loganathan, D & Ramamoorthy, P 2013, 'Multicost Parameters Based AODV Routing Protocol for Effective Transmission in Wireless Ad hoc Networks' International Journal of Information Technology & Computer Sciences Perspectives- Pezzottaite Journals, vol. 1, no. 1, pp. 118-122
- 8) NamithaShajan & Dr.D.Loganathan 2016, 'Edge Preserving Decomposition-Based Haze Removal in Video Sequence Using Koschmiedars Law' International Journal of Computer Science and Information Technologies, Vol. 7 (3) , pp 1263-1266
- 9) Anju P J & Dr.D.Loganathan 2016, 'Image Fusion using NSCT Theory and Wavelet Transform for Medical Diagnosis', International Journal of Computer Science and Information Technologies, Vol. 7 (3) , pp. 1507-1510.
- 10) Chippy Thomas & Dr.D.Loganathan 2016, 'Enhanced Holistic and Component Based Algorithm for Sketch to Photo Matching in Criminal Investigations', International Journal of Computer Science and Information Technologies, Vol. 7 (3) , pp. 1267-1272.
- 11) ShanilaThampi & Dr.D.Loganathan 2016, 'Progressive of Duplicate Detection Using Adaptive Window Technique', International Journal of Computer Science and Information Technologies, Vol. 7 (3), pp.1549-1551
- 12) Chinju V.C & Dr.D.Loganathan 2016, 'An Enhanced NVSS Scheme for Visual Secret Sharing', International Journal of Computer Science and Information Technologies, Vol. 7 (3) , pp.1545-1548
- 13) Delvia Mary Vadakkan, Dr. D. Loganathan 2016, 'Re-Ranking of Web Image Search Using Relevance Preserving Ranking Techniques', International Journal of Computer Science and Information Technologies, Vol. 7 (3), pp.1514-1518
- 14) Anakha Satheesh P, Dr. D. Loganathan 2016, 'De-Speckling of SAR Images Based on Optimal Basis Wavelet via Patch Ordering', Global Journal of Engineering Science and Research Management, vol 3(6), pp 49-55.
- 15) Shamlin Shamsudheen, Dr.D.Loganathan. 2016, 'Salient Region Detection Based on Average Saliency Map with Spatial Variance', International Journal of Engineering Sciences & Research Technology, Vol. 5(7), pp.1245-1254.
- 16) Febil V A, Dr.D.Loganathan. 2016, 'Sensor Deployment Algorithm for Hole Detection and Healing by Using Energy Based Local Healing', International Journal of Engineering Sciences & Research Technology, Vol. 5(7), pp.1423-1432.
- 17) Divina T.K Premdas, Dr.D.Loganathan. 2016, 'Advanced Approach for Secure Retrieval of Data in Disruption Tolerant Military Networks', International Journal of Engineering Sciences & Research Technology, Vol. 5(7), pp.1433-1436.
- 18) Loganathan, D 2016, "Analysis of Mathematical Model for 2 Levels With Five Factors Using Minitab to Find an Optimal Path in Wireless Ad Hoc Networks", Asian Journal of Research In Social Sciences and Humanities, Vol. 6, No. 8, pp. 360-369.
- 19) Loganathan, D & Ramamoorthy, 2016, "Performance Enhanced in wireless Ad Hoc Networks Using Multicost Parameters Based Optimized Link State Routing Protocol", Asian Journal of Research in Social Sciences and Humanities, Vol. 6, No. 8, pp. 864-872
- 20) Arya Vijayakumaran Nair, Dr. D. Loganathan & Asha. S, 2017, "Enhancement in Image Mosaicing using Voronoi and Surf Algorithm" International Journal of Computer Science and Network, Volume 6, Issue 3, pp-313-319.
- 21) Renju Mohan, Sruthy M. S & Dr. D. Loganathan, 2017, "Edge Preserved and Segmented Image Denoising", International Journal of Computer Science and Network, Volume 6, Issue 3, pp-320-324.

- 22) Anupama B.L, Sanaj M.S, Asha Paul & Dr. D. Loganathan, 2017, “A Novel Classifier for Gender Classification from Iris Code used for Recognition”, International Journal of Computer Science and Network, Volume 6, Issue 3, pp- 325-331.
- 23) Muneebahmdhyiddeen, Asha Paul, Bastian Babu& Dr. D. Loganathan, 2017, “Trustable and Secured Routing in Wireless Sensor Networks”, International Journal of Computer Science and Network, Volume 6, Issue 3, pp- 332-335.
- 24) Dr.D.Loganathan, Dr.D.Sivaganesan, T.Karthikeyan, 2018, “Performance Analysis Of Iot Based Water Irrigation Systems”, International Journal of Scientific Research and Review, Vol 7, Issue 10, pp.523-528.
- 25) Manju Mohanan.M; Dr.Loganathan.D; Nisha.M, 2019, “C App - A Mobile App for Crime Report”, International Journal of Computer Science and Network, Vol 8, Issue 3, pp- 294-299
- 26) Nishiba Kabeer, Dr.Loganathan.D, Cowsalya.T 2019, “Prediction of Crop Yield Using Data Mining ”, International Journal of Computer Science and Network, Vol 8, Issue 3, pp- 300-304.
- 27) Ms. S. Archana, Dr. D.Loganathan, 2020, “ Block Chain Based Secure Access Control With Intrusion Detection Mechanism ” International Journal for Science and Advance Research In Technology Vol 6 Issue 9, pp- 302-306.
- 28) Aliya CH, Dr.D.Loganathan, 2021, “Deep Learning Approach for Phishing Attacks” International Research Journal of Engineering and Technology, Vol 08, Issue 02, pp-1462-1465
- 29) G.Sreenithi, S.Mehaladevi, S.Sunmitha, Dr.D.Loganathan, 2021, Stock Value Prediction Using Long Short Term Memory (Deep Learning), International Research Journal of Engineering and Technology, Vol 08, Issue: 03 , pp-2463-2465.
- 30) M Raja, D Loganathan, June 2022, “The Enhancement of Big Data Storage by Using Rapid Expansion Freedom Access Approach”, ICTACT Journal on Data Science and Machine Learning, , Volume: 03, Issue: 03, pp 316-321.
- 31) Kannu Priya, Dr. R. Kesavamoorthy, Dr. Raja M, Dr.S.P.Anandaraj, Dr. D. Loganathan, Dr. Thanga Mariappan L, September 2022, “Multimodal Biometrics Authentication Using Thermal Hand Vein and Hand Dorsa” Neuro Quantology access/Multimodal+Biometrics gy , Volume 20, Issue 9 , Pp 3423-3432,https://www.neuroquantology.com/open-+Authentication+Using+Thermal++Hand+Vein+and+Hand+Dorsa_5566/ (Scopus Indexed)
- 32) M Raja, D Loganathan, December 2022, The Control and Automation Management Model for Air Transport Monitoring using Machine Learning, ICTACT Journal on Data Science and Machine Learning, , Volume: 04, Issue: 01, pp 387-391.
- 33) D. Loganathan, Umme Kulsum, Arbaz Ahamed, Sania M, Shakthi S, March 2023, Survey of Graphical Password Authentication Systems Suitable for Android Application, Journal of Research and Applications of Web Development and Design, Volume: 6, issue: 1, pp -31-43.
- 34) M. Raja, P. Devisivasankari, M. Vilasini, D. Loganathan, 2023, The Enhanced Optimization of Information Mining Systems for Big Data Protection using Blockchain,, European Chemical Bulletin, Volume -12, Special Issue-3 pp 173 – 183 (Scopus Indexed) <https://www.eurchembull.com/issue-content/the-enhanced-optimization-of-information-mining-systems-for-big-data-protection-using-blockchain-2518>

- 35) Dr. D. Loganathan, Ganga Gyatso, Devarshi Kothari, Churhan Rai, Divyansh Swami, May 2023, To Analyse Human Sentiments on Social Media Platforms and Their Interest Inference by Using Deep Learning, International Journal for Research in Applied Science and Engineering Technology, Vol 11, issue 5, pp -3638-3644. <https://doi.org/10.22214/ijraset.2023.52076>
- 36) Mohammed Yasir Arafath, Omar Ismail Amin, Rayan Asif, Rayan Mohammed Abdur Rehman, D Loganathan, Prof. Veeresh K M, May 2023, Design and Implementation for Monitoring of Coma Patients using OpenCV, Advancement of Computer Technology and its Applications, Vol 06, Issue 03, pp- 19-26 <http://hbrppublication.com/OJS/index.php/ACTIA/article/view/3440>,
- 37) D Loganathan, Umme Kulsum, Shakthi S, Sania M, Arbaz Ahamed, May 2023, Graphical Password Authentication: Image Grid Based Digital Lock for Mobile Apps, International Journal for Research in Applied Science & Engineering Technology, Volume 11, issue 5, pp: 4735-4747. <https://doi.org/10.22214/ijraset.2023.52681>
- 38) Dr. D Loganathan, Monisha R, Mythri R, Nasreen Anjum, May 2023, Cervical Cancer Detection Using CNN By Screening Based on Cytopathology, International Research Journal of Modernization in Engineering Technology and Science, Vol 5, issue 5, 6229- 6237- https://www.irjmets.com/uploadedfiles/paper//issue_5_may_2023/40022/final/fin_irjmets1684926006.pdf.
- 39) Jayavadivel Ravi a, Rajkumar N a, Viji C a, Loganathan D b, K S N Sushma c, Stalin M, January 2024 Investigation of Task Scheduling in Cloud Computing by using Imperialist Competitive and Crow Search Algorithms, Procedia Computer Science, Volume 230, 2023, Pages 879-889, <https://doi.org/10.1016/j.procs.2023.12.044> (Scopus)
- 40) Sridevi M.J. Pradosh Kumar Sharma, Dhiliphan Kumar M, Loganathan D, Saleem Ahmed, March 2024, Optimizing Efficiency and Performance in 5G Networks Through a Dynamic Resource Allocation Algorithmic Framework, Journal on Communication Technology – ICTACT, Vol15 (1), pp 3112-3118; DOI: 10.21917/ijct.2024.0463 (UGC)
- 41) Loganathan D, Navya Shree A, Saatwik Naik, Sagar C, Usha V A, May 2024, Enhancing Library Chatbot using Machine Learning with Read Aloud Technology, International Journal of Creative Research Thoughts (IJCRT), Volume 12, Issue 5, pp 518-525 (UGC)
- 42) Loganathan D, Aman Kumar Mishra, Aniket Kumar, Janardhan M, Manikant Kumar, May 2024, Elevate The Online Shopping Experience Using Augmented Reality (AR) And Artificial Intelligence (AI) For Enhanced Apparel Recommendations, International Journal of Creative Research Thoughts (IJCRT), Volume 12, Issue 5, pp 547-553 (UGC).
- 43) Nachiappan, Balusamy Najmusher, H Nagarajan, G Rajkumar, N Loganathan, D Gobinath, May 2024, Exploring the Application of Drone Technology In the Construction Sector, Salud, Ciencia y Tecnologia - Serie de Conferencias, Vol. 3, pp 1-9, <https://doi.org/10.56294/setconf2024713>
- 44) Priyanka R., Bharani B.R., Preethi S., Jayanthi M.G., Loganathan D, A Novel Swift and Intelligent Approach for Revamping Shopping Experience, International Journal of Computer Applications, Volume 186 - Number 28, pp 36-41, 10.5120/ijca2024923789 (WoS)
- 45) Vijayalaxmi R Yalavigi, Dr. Bharani B R, Dr. Preethi S, Dr. Jayanthi M G, Dr

Loganathan D, Sep 2024, Region Classification Using Clustering Based Approach For Forest Fire Disaster Management, Vol 10 ISSUE 9, Pp: 180-187, DOI:10.37897.GRJ.2023.V10I9.24.5140710

Papers Presented in International and National Conferences

- 1) Loganathan, D & Ramamoorthy, P January 11th and 12th of 2011, 'Performance Analysis of Multi Metrics Based AODV Routing Protocol for Mobile Ad-hoc Networks', International Conference on Computer communication and Informatics, Sri Shakthi Institute of Engineering and Technology, Coimbatore.
- 2) Loganathan, D & Ramamoorthy, P December 14th and 15th of 2012, 'Multicast Parameters Based AODV Routing Protocol for Effective Transmission in Wireless Ad hoc Networks', International Conference on Futuristic Automation and Control Engineering, Dhanalakshmi Srinivasan College of Engineering, Coimbatore.
- 3) Loganathan, D & Ramamoorthy, P February 21st and 22nd of 2013, 'Efficient Routing with Multicast Parameters Based DSDV Protocol in Wireless Ad hoc Networks', Proceedings of the International Conference on Pattern Recognition, Informatics and Mobile Engineering, Periyar University, Salem.
- 4) Loganathan, D & Ramamoorthy, P 2013, 'Efficient Routing with Multicast Parameters Based DSDV Protocol in Wireless Ad hoc Networks', IEEE xplore digital library.
- 5) Loganathan, D & Ramamoorthy, P April 27th of 2009, 'Secured Communication for Wi-Fi Technology', National Conference on Computational Intelligence, VMKV Engineering College, Salem.
- 6) Loganathan, D & Ramamoorthy, P April 8th and 9th of 2010, 'Analysis of Multicast Routing in Mobile Ad hoc Networks with respect to Various Energy Parameters', National Conference on Recent Advances in Communication Systems Computing and Green IT, Hindusthan College of Engineering and Technology, Coimbatore.
- 7) Loganathan, D & Ramamoorthy, P March 15th of 2013, 'Performance Analysis of Enhanced CADV Protocol for Efficient Routing in Wireless Ad hoc Networks', National Conference on Innovative Technologies in Computer Science, Hindusthan Institute of Technology, Coimbatore.
- 8) Loganathan, D, 23rd March 2018, "IoT Based Water Irrigation System", 5th National Conference on Advanced Electrical Power, Signal Processing and Communication Network System, Selvam College of Technology, Namakkal, Tamilnadu.
- 9) Loganathan, D, December 9-10 of 2022, 'Business Strategy Plan using a Deep Reinforcement Learning Algorithm, International Conference on Artificial Intelligence Machine Learning and Robotics - A2CMR -2022, Presidency University, Bangalore, Karnataka.
- 10) Loganathan, D, March 2023, "A Secure AODV Algorithm based Malicious Nodes detection in Flying Ad Hoc Networks", International Conference on Recent Trends in Data Science and Its Applications (ICRTDA 2023), SRM Institute of Science and Technology, Kattankulathur, Tamilnadu.
- 11) Dr Priyanka Desai A, Dr Preethi S, Dr D Loganathan, Dr Bharani B R, October 2023, "Qualitative and quantitative data analysis using Classification, and Ensemble techniques to optimize and predict the performance of reviews", First IEEE International Conference on Advances in Electrical, Electronics and Computational Intelligence (ICAEECI), KSR College of Engineering, Tiruchengode, Tamil Nadu, India,

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| | <p>12) Jayavadivel Ravia, Rajkumar N, Viji C , Loganathan D, K S N Sushma,Stalin M, November 2023, “Investigation of Task Scheduling in Cloud Computing by using Imperialist Competitive and Crow Search Algorithms” 3rd Science Direct International Conference on Evolutionary Computing and Mobile Sustainable Networks (ICECMSN 2023), Hindusthan Institute of Technology, Coimbatore, Tamil Nadu, India.</p> <p>13) Dr Nadhagopal S M, Dr Loganathan D, First International Conference on Data Engineering & Machine Intelligence (ICDEMI - 2023), held at GITAM School of Technology, Bangalore - A literature Survey - Application of Image processing for the effective Diagnosis of Rod cone Dystrophy using by OCT.</p> <p>14) M Shiva Shankar, Jayanthi M. G, Adishesha R, Prashanth Kannadaguli, Hemanth Kumar KD Loganathan, Fourth IEEE Sponsored Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (Jan 2024, ICAECT 2024) held at Shri Shankaracharya Technical Campus, Bhilai - Image based Plant Disease Classification for the Management of crop health.</p> |
| <p>Patents</p> | <p>Patent filed and published</p> <ul style="list-style-type: none"> ❖ Patent 1: Filed, “Blockchain Based Secure Transportation System for Sustainable Smart Cities”, Ref No. 202241037552, Application No. TEMP/E-1/42336/2022-CHE, 30-06-2022 ❖ Patent 2: Filed, “Blockchain and Cloud based Digital Forensic Examination System using IOT and Machine Learning”. Ref No.202241037509, Application No.TEMP/E-1/42274/2022-CHE, 29-06-2022 ❖ Patent 3: Filed, “Smart Intelligent Controller for Irrigation and Monitoring using Agro Deep Learning algorithm”, Ref No. 202241037597, Application No. TEMP/E-1/42386/2022-CHE, 30-06-2022 ❖ Patent 4: - Published - Application No: 202341032271 / 07-05-2023 - Cash Withdrawal Using QR Code from the Mobile Phone in ATM Machine. ❖ Patent 5: - Filed - Application No: 202341032277 / 07-05-2023 - Intelligent CCTV Cameras for Residential Area Monitoring ❖ Patent 6: - Application ready for publication - Application No: 202341042864 / 27-06-2023 - Machine Learning and Deep Learning based Intelligent Auto Directed Camera for Surveillance ❖ Patent 7:- Application ready for publication - Application Number 202311055342 / 18/08/2023 Blockchain Based Approaches for Monitoring Fraud Detections of Digital Payment Industry 4. ❖ Patent 8:- Filed - Application Number R20234034897 / 03/09/2023 - Smart Medic - Revolutionizing Medication Adherence through Interactive Pill Dispensing. ❖ Patent 9:- Filed - Application Number 202341064884 / 27/09/2023 - Artificial Intelligence based Approaches for Automatic Question Paper Generation for the Digital Education. ❖ Patent 10:- Filed - Application Number 202311078501 / 18-11-2023 - Knowledge Dissemination Gaps in AI-powered Psychological and Educational Assessment and Decision-making Guidelines ❖ Patent 11:- Filed - Application Number 202311078502 / 18-11-2023 - Enhancing Educational Outcomes: A Machine Learning Approach to Student Achievement Prediction |
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**Book/Book
Chapters****Text Book and online materials**

1. A Text book of Computer Architecture and Organization, Dr. R. Thenmozhi, Dr. Shivilal Mewada, Dr D Loganathan, Dr. C. N. Sujatha. ISBN No - 978-93-95331-25-8
2. A Textbook of Artificial Intelligence - Concepts and Applications – ISBN 978-81-970228-0-7
3. Study Materials - Operating Systems - BCS303 –PPTs – ISBN 978-93-340-2969-7
4. Study Materials – Computer Networks - 21CS52 -PPTs– ISBN 978-93-340-3917-7

Research and Consultancy:

- ❖ 5G Research Lab Established and undertaken the students internship under CCCIR.