Dr. R. P. Anto Kumar

Dean – Academics | Professor, Department of Computer Science and Engineering
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Professional Profile

Dr. R. P. Anto Kumar is Dean – Academics and Professor of Computer Science and Engineering at St. Xavier’s Catholic College of Engineering. He has served the institution since August 2000 in teaching, departmental leadership and academic administration. His interests include image processing, biometrics, multimedia and cloud computing. His academic contributions encompass research supervision, funded research, publications, patents, books and industry-linked faculty and student development.

Academic Qualifications

• Ph.D., Computer Science – Bharathiyar University, September 2014. Thesis: Applying keystroke and mouse dynamics for personal authentication using artificial bee colony optimization technique.

• M.E., Computer Science and Engineering – Government Engineering College, Manonmaniam Sundaranar University, April 2000.

• B.E., Electronics and Communication Engineering – Karunya Institute of Technology, Bharathiyar University, May 1998.

Professional Experience

• Dean – Academics and Professor, St. Xavier’s Catholic College of Engineering (June 2022 – present).

• Head of Department and Professor, Computer Science and Engineering (June 2018 – May 2022).

• Head of Department, Information Technology (February 2009 – June 2018; in successive academic ranks).

• Lecturer / Senior Lecturer and Head of Department, Information Technology (June 2003 – February 2009).

• Lecturer, Computer Science and Engineering (August 2000 – June 2003).

Academic and Institutional Responsibilities

Dean – Academics; ICT Academy College Coordinator; Convener – Software Training Cell, Teaching Development Cell, Study Tour Committee, Canteen Development Committee and Curriculum Development Committee; Coordinator – College Website; Member Secretary – Academic Council; Member – Examination Committee, College Development Committee and Staff Development Committee.

Research Interests

Image Processing • Biometrics • Multimedia • Cloud Computing

Research and Scholarly Contributions

Research publications	31 journal publications; 16 conference publications
Books	5 co-authored books
Patents	3 patents listed

Funded research	1 completed DST-funded research project
Ph.D. guidance	5 degrees awarded (including 1 under joint supervision); 7 research scholars pursuing Ph.D. at the time of the profile update

Funded Research Project

Audio Electronics System for Matured Coconut Identification – funded by the Department of Science and Technology (DST), Government of India, under the Technology Development Programme (Agro-Tech). Project value: ₹17,94,303; duration: November 2020 – October 2022.

Ph.D. Research Guidance – Degrees Awarded

• Bright Jose J – 19 August 2025 – Low-light image enhancement using foreground–background separation.

• Neethu Ravindran – 22 December 2025 – Deep-learning-based MANET routing and link lifetime prediction.

• Varun C M – 29 July 2026 – Secure cloud framework for government data management.

• Angel Merlin Suji M – 26 October 2026 – Energy-aware optimization for mobile charger path planning and data collection in wireless sensor networks.

• Absa S – 23 April 2019 – Performance analysis of cloud computing services (joint supervisor).

Journal Publications (Complete List)

1. C. M. Varun and R. P. Anto Kumar, “Banking-Based Sensitivity Level Analysis Framework for Secure and Authenticated Cloud Data Using Multi-Technique Cryptographic Integration,” International Journal of Software Engineering and Knowledge Engineering, World Scientific, pp. 1–42, April 2026. DOI: 10.1142/S0218194026410019. SCI Indexed.

2. Aswini S., Anto Kumar R. P., Varun C. M., Seenuvasan P., Dhanalakshmi R. and G. Sekar, “ChipGPT: Leveraging Large Language Models for Automated and Optimized SoC Floorplanning,” IEEE Xplore, IEEE, June 2026. DOI: 10.1109/ICCSP68173.2026.11539254. SCI Indexed.

3. Varun C. M., Anto Kumar R. P., Paulraj D. and Priyanka P. S., “Multiobjective Dynamic Resource Allocation in Cloud Computing Using Harris Hawk Optimization Algorithm (MDLB-HHO),” PLOS One, Vol. 21, No. 6, June 2026. DOI: 10.1371/journal.pone.0351653. SCI Indexed.

4. I. Jency and R. P. Anto Kumar, “FinQuaXBot: Enhancing Trust and Security in Personalized Investment and Tax Forecasting Using Homomorphic Encryption and Meta-Reinforcement Learning with Explainability,” Expert Systems with Applications, Elsevier, Vol. 287, May 2025. DOI: 10.1016/j.eswa.2025.128136. SCI Indexed.

5. C. M. Varun and R. P. Anto Kumar, “Novel Approach for Keyword Search Over Secure Sensitive Data on Cloud Environment Under Section 43A of the IT Act Using Fuzzy Multi Keyword Search Approach,” LEX LOCALIS – Journal of Local Self-Government, Vol. 23, No. 10, p. 1609, September 2025. DOI: 10.52152/801509. Scopus Indexed.

6. M. Angel Merlin Suji and R. P. Anto Kumar, “Joint Data Gathering and Energy Efficient Wireless Sensor Node Charging Based on Coati Optimization in Wireless Sensor Networks,” Journal of Electronic Materials, Springer, Vol. 54, pp. 9865–9878, September 2025. DOI: 10.1007/s11664-025-12336-1. SCI Indexed.

7. P. T. Priyanga and R. P. Anto Kumar, “Adaptive Prototype-Based Subtle Transient Pattern Transformers for Enhanced Neonatal Seizure Classification and Severity Assessment,” International Journal of Developmental Neuroscience, Wiley, Vol. 85, No. 7, pp. 1–24, November 2025. DOI: 10.1002/jdn.70059. SCI Indexed.

8. J. Bright Jose and R. P. Anto Kumar, “A Novel Method for Video Enhancement Under Low Light Using BFR-SEQT Technique,” The Imaging Science Journal, Taylor & Francis, February 2024. DOI: 10.1080/13682199.2024.2315855. Web of Science Indexed.

9. L. R. Jonisha Miriam, R. P. Anto Kumar, P. J. Merbin Jose and Ajith J. Kings, “Amine Functionalised Graphene Embedded Polyvinyl Alcohol (PVA) and PVA-Chitosan Hydrogel Composites,” International Journal of Biological Macromolecules, Elsevier, April 2024. DOI: 10.1016/j.ijbiomac.2024.131497. Web of Science Indexed.

10. Neethu Ravindran and R. P. Anto Kumar, “SECOA: Serial Exponential Coati Optimization Algorithm for MANET Routing with Link Lifetime Prediction,” Engineering Science and Technology, an International Journal, Elsevier, October 2024. DOI: 10.1016/j.jestch.2024.101869. Web of Science Indexed.

11. Calistus Mohandhas Varun, Raphel Pankiras Anto Kumar, Michael Raj Judith Reya and Rangini Murugan, “Secured Big Data Storage in Cloud by Intelligent Authentication and Privacy Preservation via Intelligent Deep Learning-Aided Heuristic Strategy,” International Journal of Simulation and Process Modelling, Inderscience Enterprises Ltd., Vol. 21, No. 2, pp. 90–107, October 2024. DOI: 10.1504/IJSPM.2024.141986. Scopus Indexed.

12. Neethu Ravindran and Dr. R. P. Anto Kumar, “Performance Study of ODDVRP and ISIRP for Mobile Ad Hoc Networks,” International Journal of Advances in Engineering and Emerging Technology (IJAEET), Vol. 13, No. 2, p. 263, November 2022. Google Scholar Indexed.

13. M. Angel Merlin Suji and Dr. R. P. Anto Kumar, “A Review: Mobile Ad Hoc Network Based Routing Protocols and its Challenges,” International Journal of Advances in Engineering and Emerging Technology (IJAEET), Vol. 13, No. 1, p. 19, August 2022. Google Scholar Indexed.

14. Jinu Celine and Dr. Anto Kumar R. P., “A Summary of Literature Review: Convolutional Neural Networks,” International Journal of Innovative Research in Technology (IJIRT), Vol. 8, No. 7, p. 24, December 2021. Google Scholar Indexed.

15. Neethu Ravindran and R. P. Anto Kumar, “Nature Inspired Cleaver Algorithms for Routing in MANET – A Review,” Journal of Critical Reviews, Vol. 7, No. 5, p. 1692, March 2020. DOI: 10.31838/jcr.07.05.287. Scopus Indexed.

16. Absa Stephen, Shajulin Benedict and R. P. Anto Kumar, “Monitoring IaaS Using Various Cloud Monitors,” International Journal of Cluster Computing: The Journal of Networks, Software Tools and Applications, Springer US, Vol. 16, No. 3, p. 117, January 2018. DOI: 10.1007/s10586-017-1657-y. Scopus Indexed.

17. R. P. Anto Kumar, N. Nandhagopal and R. Sivakumar, “Hybrid Image Watermarking Technique Based on Integer Wavelet Transform and Neural Network,” International Journal of Printing, Packaging & Allied Sciences, Vol. 4, No. 3, pp. 1883–1889, December 2016. Google Scholar Indexed.

18. R. Sivakumar, R. P. Anto Kumar and N. Nandhagopal, “Computational Artificial Bee Colony Optimization – A Survey,” International Journal of Printing, Packaging & Allied Sciences, Vol. 4, No. 3, pp. 1913–1918, December 2016. Google Scholar Indexed.

19. N. Nandhagopal, R. Sivakumar and R. P. Anto Kumar, “Robust Digital Image Watermarking Method Based on FFT-IWT,” International Journal of Printing, Packaging & Allied Sciences, Vol. 4, No. 3, pp. 1664–1670, December 2016. Google Scholar Indexed.

20. R. P. Anto Kumar, R. Sivakumar and S. S. Aalin Grace, “A New Implementation of Graphical Password Scheme for Captcha Based Security System,” Middle-East Journal of Scientific Research, IDOSI Publications, Vol. 23, No. 7, 2015. DOI: 10.5829/idosi.mejsr.2015.23.07.105. Scopus Indexed.

21. R. P. Anto Kumar, R. Sivakumar and P. Archana, “Automatic Way of Diagnosing Alzheimer’s Disease,” International Journal of Applied Engineering Research, Vol. 10, No. 61, pp. 187–192, January 2015. Scopus Indexed.

22. R. P. Anto Kumar, R. Sivakumar and M. N. Chithra, “An Efficient Method for Detecting Image Forgery,” International Journal of Applied Engineering Research, Vol. 10, No. 61, pp. 198–206, January 2015. Scopus Indexed.

23. R. Sivakumar, E. Ben George and R. P. Anto Kumar, “A Hybrid Technique for Automated MRI Brain Images Classification,” International Journal of Applied Engineering Research, Vol. 10, No. 61, pp. 207–210, January 2015. Scopus Indexed.

24. R. P. Anto Kumar, R. Sivakumar and S. Aswathy, “A Novel Method for Car License Plate Detection,” Middle-East Journal of Scientific Research, Vol. 23, No. 8, pp. 1611–1616, January 2015. DOI: 10.5829/idosi.mejsr.2015.23.08.22376. Scopus Indexed.

25. Hizana M. and Anto Kumar R. P., “Adaptive Local Entropy Based Automatic Virus Particle Detection,” International Journal of Engineering Research and Applications, Vol. 4, No. 2, pp. 485–492, February 2014. Google Scholar Indexed.

26. Renimol T. G. and Anto Kumar R. P., “Automatic Track Creation and Deletion Framework for Face Tracking,” International Journal of Advanced Research in Computer Engineering & Technology, Vol. 3, No. 2, pp. 548–552, February 2014. Google Scholar Indexed.

27. J. R. Nisha and R. P. Anto Kumar, “User Authentication Based on Keystroke Dynamics,” International Journal of Engineering Research and Applications, Vol. 4, No. 3, pp. 1–5, March 2014. Google Scholar Indexed.

28. S. Shalimettisha and R. P. Anto Kumar, “A New Proposed Modification on the BDND Filtering Algorithm for the Removal of High Density Impulse Noise,” International Journal of Engineering Research and Applications, Vol. 4, No. 4, pp. 1–3, April 2014. Google Scholar Indexed.

29. Yedu Manmadhan and Anto Kumar R. P., “Small Area Edge Preservation for Multiscale Decomposition for High Dynamic Range Image Tone Mapping,” International Journal of Advanced Research in Computer Engineering & Technology, Vol. 3, No. 4, pp. 1107–1112, April 2014. Google Scholar Indexed.

30. R. P. Anto Kumar and M. Karnan, “Applying Keystroke Dynamics for Personal Authentication Using Artificial Bee Colony Optimization Technique,” European Journal of Scientific Research, Vol. 90, No. 2, pp. 234–242, November 2012.

SCI Indexed.

31. R. P. Anto Kumar, M. Akila and M. Karnan, “Keystroke Dynamics – A Meta Heuristic Approach,” International Journal of Soft Computing, Vol. 7, No. 4, pp. 169–180, January 2012. Scopus Indexed.

Selected Awards and Recognition

• Best Coordinator Award – ICT Academy (2026).

• Best Coordinator Award – ICT Academy (2025).

• Rising Contributor Award – MongoDB and ICT Academy (2025).

• Academic Excellence Award – ICT Academy (2024).

• Academic Partner Excellence Award – ICT Academy (2022).

• Best Coordinator Awards – ICT Academy (2019, 2016 and 2015).

Professional Memberships

Indian Society for Technical Education (ISTE), LM27981 • Computer Society of India (CSI), N1136266 • Institution of Engineering and Technology (IET), 1100372370

Researcher and Faculty Identifiers

AICTE Faculty ID: 1-466530231 | Anna University Faculty ID: 2627081977 | Vidwan ID: 177230

ResearcherID: AAE-3089-2022 | Scopus Author ID: 57225853401 | Anna University Research Supervisor Ref.: 2940089

Academic Profiles

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