

Faculty Profile

Personal Information

- **Name:** Rakesh K R
- **Designation:** Assistant Professor
- **Department:** Electronics and Telecommunication Engineering
- **Email:** rakeshkr@rvce.edu.in
- **Phone:** [Office Phone]

Google Scholar / ResearchGate /

LinkedIn: <https://scholar.google.com/citations?user=irimPb8AAAAJ&hl=en>

Domain of Expertise

Communication

Research Focus

- **Primary Area:** underwater communication and space communication
- **Allied Areas:**
 - 5G
 - IOT

Academic Qualifications

- **Ph.D.:** ECE, NITK, [Perusing]
- **M.Tech:** [Digital communication and Networking], [VTU], [2013]
- **B.E./B.Tech:** [ECE], [VTU], [2011]

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	ISRO	Project trainee	August 2012 to June 2013
2.	BNMIT	Assistant professor	JUNE 2014 to JAN 2016

3	RVCE	Assistant professor	FEB 2016 to till date
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Publications & Patents

Journal Publications

1. Rakesh K.R et al., "ANGULAR POSITION DETERMINATION OF SATELLITES USING VLBI AND Δ -DOR METHODOLOGY", IJIRD Transactions On research and development in the APRIL 2013
2. Mr. Rakesh K R, Ojashwini R N and Greeshma N D, Implementation of VANET based Accident Detection System in proceedings of International Conference on Signal, Image Processing Communication and Automation - ICSIPCA- 2017.
3. Akshaya, Megha Dilipakumar and Mr. Rakesh K R, Design of Lens Antenna for Low Terahertz Application in proceedings of International Conference on Signal, Image Processing Communication and Automation - ICSIPCA- 2017.
4. Mr. Rakesh K R et al., "A REVIEW OF CHECKER AND CHECKER TOOLS USED IN REGISTER TRANSFER LOGIC", in proceedings Wutan Huatan Jisuan Jishu , UGC CARE GROUP II SCOPUS INDEXED JOURNAL ISSN:1001-1749 PP-374-377.MAY 2020
5. Mr. Rakesh K R et al., "A REVIEW OF 5G TECHNOLOGY USE IN SELF DRIVING CARS", International Journal of Engineering Technology Research & Management, ISSN: 2456:9348, PP71-74, MARCH 2020.
6. Mr. Rakesh K R et al., "A two-layer Audio Encryption system using Quaternion Transform and image as a Variable Key" in Wutan Huatan Jisuan Jishu , UGC CARE GROUP II SCOPUS INDEXED JOURNAL ISSN:1001-1749 PP-477-487.MAY 2020.
7. Swaneel Bose , Rakesh K R , "Server status Monitoring using Advanced Machine Learning Algorithms" in International Journal of Creative Research Thoughts , ISSN: 2320-2882, pp 4561-4568 Volume 8, Issue 6 June 2020
8. Prithvik, Rakesh KR "HONEY ENCRYPTION ALGORITHM TO SAFEGUARD AGAINST BRUTE FORCE ATTACKS" ,International Journal of Engineering Technology Research & Management, ISSN: 2456:9348 PP-7-10 Vol-4 Issues 05, May -2020
9. Mr. Rakesh K R et al. "Federated Learning and Wireless Communication", Journal of Huazhong University of Science and Technology ISSN-1671-4512, July 2021
10. Mr. Rakesh .et al. "Weather forecasting using deep neural networks", High technology journals ISSN-1006-6748 PP 214-219, vol -28, issue 8, August 2022
11. Mr. Rakesh .et al. "An Overview on Business Intelligence", High technology journals ISSN-1006-6748 PP 220-225, vol -28, issue 8, August 2022.

Conference Papers

1. Rakesh K.R et al., "Introduction to VLBI signal processing unit for DELTA-DOR" International conference on Advanced in Engineering and Technology (ICAET-2013), Dr. M.G.R. Educational and Research Institute University, Chennai, April-2013, PP 50 -53.
2. Mr. Rakesh K R et al., Implementation of VANET based Accident Detection System in proceedings of International Conference on Signal, Image Processing Communication and Automation - ICSIPCA-2017.

3. Mr. Rakesh K R et al., PC to PC File Transmission using Li-Fi Technology, in proceedings of International Conference on Signal, Image Processing Communication and Automation - ICSIPCA-2017.
4. Akshaya, Megha Dilipakumar and Mr. Rakesh K R, Design of Lens Antenna for Low Terahertz Application in proceedings of International Conference on Signal, Image Processing Communication and Automation - ICSIPCA- 2017.
5. Sukerthi G, R Sindhu, Rakesh K R, "Detection of micro aneurysm in fundus images for monitoring of diabetic retinopathy", in IEEE technically sponsored 2nd international conference on computational systems and information technology for sustainable solutions- CSITSS 2017.
6. Mr. Rakesh K R et al., "Arm controller based E-Cradle", in proceedings IEEE sponsored 2nd international conference ICECA2018, from 29-31 march 2018.
7. "Image Recognition, Classification and Analysis using Convolutional Neural Networks" in the IEEE sponsored First International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2022) organized by the Department of Electrical and Electronics Engineering, K. Ramakrishnan College of Engineering, Tiruchirappalli, Tamil Nadu, India during 16 – 18, February 2022.
8. "Intrusion Detection System Using Machine Learning" International Conference on Advances in Data-driven Computing and Intelligent Systems Nov 2023

Books/Book Chapters

1. Dhankani, M., Rakesh, K.R., Patadia, A. 20 March (2024). Intrusion Detection System Using Machine Learning. Lecture Notes in Networks and Systems, vol 893. Springer, Singapore. https://doi.org/10.1007/978-981-99-9518-9_28

Patents **[Filed / Published / Granted]**

1. A NOVEL MACHINE LEARNING APPROACH FOR SMART HEALTH CARE FRAMEWORK BASED ON BLOCK CHAIN, 202221051553, 20/10/22
2. Design of pregnancy monitoring apparatus, 358315-001, 10/02/2022

Awards & Recognitions

- [Top achiever in MTECH], [DSCE], [2012]

Student Supervision

- **M.Tech/M.Sc. Students:** [4]
- **Undergraduate Research Mentees:** [50]

Professional Roles

- **Committee Member:** [international conference held at RVCE]

Teaching

At present doing my PhD at NITK

Professional Roles

Member Of IETE

Responsibilities

- **Academic:** [Exam Coordinator/Test Coordinator/ / Digital learning coordinator]
- **Administrative:** [NBA coordinator, Lab In-charge]