Faculty Profile

Personal Information

Name: Dr. K. Sreelakshmi

- **Designation:** Professor & PG Dean Studies (Circuit Branches)
- **Department:** Electronics and telecommunication Engineering
- **Email:** sreelakshmik@rvce.edu.in, **dean.**circuit@rvce.edu.in
- **Phone:** 080-68188220

Google Scholar: [Link]

https://scholar.google.com/citations?hl=en&user=QTSP9VcAAAAJ&view_op=list_works&gmla=AH8HC4yOSbf-VdWEC4E-POp2tFYb1Xe6VTxRG8oGoMd0gf77hIMtmx0CMdmedKrlvf9ulC18jv7VawRG6WeYuCrD

Domain of Expertise: RF Circuit Design, Electronic Materials

Research Focus

- **Primary Area:** RF Circuit Design, Electronic Materials

Academic Qualifications

- **Ph.D.**: Computer Science, Avinashilingam University, 2010.
- **M.E.:** Electronics and Communication Engineering, Bangalore University, 2000
- **B.E**: Electronics and Communication Engineering, Bangalore University, 1990
- **Postdoctoral Research:** Not Applicable

Professional Experience

Experience

S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering	Started as Lecturer	1999 till date
2.	Indian Institute of Science	Junior research Fellow	1993-1995
3	Siddaganga Institute of Technology	Lecturer	1991-1993

Publications from 2012-13 onwards

Type	No.
International Journals:	11
International Conferences:	22
Quartile and Scopus publications from CCTVR activities	10

Publications from CCTVR Activities

1. Sundarakrishnan Narayanan, Sohan Varier, Tarun Bhupathi, Manaswini Simhadri Kavali, Mohana, P. Ramakanth Kumar, K. Sreelakshmi ***"Vehicle Turn Pattern Counting and Short Term Forecasting Using Deep Learning for Urban Traffic Management System,"*** in IEEE Access, vol. 13, pp. 8585-8593, 2025, Doi: 10.1109/ACCESS.2025. (Q1-Journal) **(Indexed by Scopus +Wos)**
   https://ieeexplore.ieee.org/document/10830516

2. "Advancing Deep Learning on Edge Devices: Fine- Tuning and Deployment of YOLOv7 Model for Efficient Object Detection in AI Based Computer Vision Applications ", Sudhanshu Shekhar Mohana Sathwik T S Ramakanth Kumar P Mayank Pritwani Sreelakshmi K, Proceedings of the Third International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT-2025) (Indexed by Scopus)

3. Abhinava Samaga, Allen Joel Lobo, Dr. Azra Nasreen, Dr. Ramakanth Kumar P, Dr. Neeta Trivedi, Peehu, Dr. Sreelakshmi K, "Enhancing Automatic License Plate Recognition in Indian Scenario" in International Journal of Electrical and Computer Engineering (IJECE), Vol. 15, No. 1, February 2025, pp. 365~373, ISSN: 2088-8708, (**Scopus (Elsevier) Q3**), DOI: 10.11591/ijece.v15i1, pp365-373

4. Shashank H R, Yashasvi Sorapalli, Nehashri Poojar S V, Hrithik Maddirala, Dr. Ramakanth Kumar P, Dr. Azra Nasreen, Dr. Neeta Trivedi , Ashish Agarwal, Dr. Sreelakshmi K, "Multi-Camera Multi-Person Tracking with DeepSORT and MySQL"in (**Scopus indexed Q3**),**Indonesian Journal of Electrical Engineering and Computer Science,** Vol. 38, No. 2, May 2025, pp. 997 – 1009, ISSN: 2502-4752, DOI: 10.11591/ijeecs.v38.i2.pp997-1009

5. Manoj N, Mohana, Manu A S, Mallikarjun N Y, Ramakanth Kumar P, Sreelakshmi K ***"Vehicle Detection, Counting and Classification Using YOLOv8 Deep Learning Model and OpenCV for Urban Traffic Management System,"*** 2024 9th International Conference on Communication and Electronics Systems (ICCES), 2024, pp. 2085-2090, Doi: 10.1109/ICCES63552.2024.10860266. **(Indexed by Scopus),**
   https://ieeexplore.ieee.org/document/10860266

6. Joel Stephen Mathew, Anumaneni Venkat Balachandra, Aditya Suresh Nair, Arman Singh Bhati, Mohana, Ramakanth Kumar P ***"A Novel Study on Deep Learning Based Adversarial Attack Techniques on Digit Recognition,"*** *2024 9th International Conference on Communication and Electronics Systems (ICCES)*, 2024, pp. 2070-2076, Doi: 10.1109/ICCES63552.2024.10859499. **(Indexed by Scopus),** https://ieeexplore.ieee.org/document/10859499

7. Manika Kesharwani, Shivabasamma Beli, Dr. Azra Nasreen, Dr. Ramakanth Kumar P, Dr. K. Sreelakshmi, Shri. T Shankar, "Detection of Manhole and Sewage Overflow Using Computer Vision", 8th **IEEE** International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS) 7th to 9th November, 2024

8. Harish A Jartarghar, Kruthi M N, Karunatharaka B, Dr. Azra Nasreen, Shri T. Shankar, Dr. Ramakanth Kumar P, Dr K. Sreelakshmi, "Detection, Identification and Alert of Wild Animals in Surveillance Videos using Deep Learning", in International Journal of Intelligent Unmanned Systems, July 2024, DOI 10.1108/IJIUS-092022-0125 , (**Scopus Indexed Q3**)

9. Sushma S Ankad, Shivaprasad Rai B, Dr. Azra Nasreen , Dr. Surbhi Mathur ,Dr. Ramakanth Kumar P , Dr. Sreelakshmi K, "Object Size Measurement from CCTV footage using deep learning", in IEEE International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS) on 16th -18th December 2021.

10. A Book Chapter in **Computational Intelligence in Pattern Recognition, Springer Ebook.** As given below

Journal Publications

1. Sumukha Prasad.U , Prithvi Shankar.N , K.Sreelakshmi & B.S.Satyanarayana , "Design and Analysis of a Nano Horn Antenna for Harnessing Solar Energy", International Journal of Current Engineering and Technology, E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Vol.4, No.2 (April 2014), pp 564-567.
2. Meghna Sarkar , K Sreelakshmi & T P Mithun , "Multiband Miniaturized Fractal Antenna For Mobile Communications", IMPACT: International Journal of Research in Engineering & Technology (IMPACT: IJRET),ISSN(E): 2321-8843; ISSN(P): 2347-4599, Vol. 2, Issue 4, Apr 2014, pp143-150. Impact Factor: 1.3268
3. A V Goutham Kumar , Shruthi S R , K Sreelakshmi and Shanthi P, "Design And Simulation Of Multiband Power Amplifier", Int. J. Elec & Electr. Eng &Telecoms. Vol. 3, No. 3, pp 75-81, July 2014 ISSN:2319-2518
4. MahimaVuppuluri, Nishanth Shyam Sunder and Dr. K Sreelakshmi , "Design and Simulation of a Linear Amplifier in C Band", International organization of Scientific Research (IOSR) Journal of Engineering (IOSRJEN) , ISSN (e): 2250 - 3021, ISSN (p): 2278 - 8719 Vol. 05, Issue 03 (March. 2015), PP 27 – 30.
5. Nini krishna, Dr. K Sreelakshmi, " Design and analysis of microstrip low pass filter for wireless applications ", International Journal of Advance Engineering and Research Development Volume 2,Issue 4 , April – 2015, Scientific Journal of Impact Factor(SJIF): 3.134 e -ISSN(O): 2348 – 4470 p - ISSN(P): 2348 - 6406
6. Maumitha Dutta and others "EM Material Characterization Techniques for meta materials", published as a document no PD-CEM/2015/1007, MARCH 2015, Centre for Electromagnetics at CSIR- NAL.
7. Shanthi P, Yashaswini P, K Sreelakshmi, J Usha, K S Jasmine, "Design and analysis of RF power amplifier using thin film passive components at 3.5 GHz", International Journal of Advanced research (IJAR), ISSN 2320-5407, Impact factor 4.588, Copernicus value 63.21, VOL 4, Issue 3, pp 29-35, 2016.
8. Praveen kumar mogre, S P Karanth, M A Sumesh, Vijay, Dilip Yadav, K Sreelakshmi, " Design and Development of Photon Counter for Silicon Carbide Ultraviolet Photometer Used in Space Instruments", Springer Book chapter in Emerging Trends in Photonics, Signal Processing and Communication Engineering - Proceedings of ICPSPCT 2018, Editors: Kadambi, Govind R, Kumar, Preetham B, Palade, Vasile, , Published in Feb 2020, Pages 219-226.
9. Misba Fathima, Sandhya Reddy B, P V Sitaraman, K. Sreelakshmi, "Design and Analysis of Dual Circular Polarized X-Band Patch Array Antenna for LEO-Satellite Data Transmission Applications",

International Journal of Advanced Science and Technology Vol. 29, No. 3, (2020), pp. 14557 – 14563, ISSN: 2005-4238 IJAST Copyright ⓒ 2020 SERSC

10. K Radhakrishna, Dr. K Sreelakshmi, "Design and Simulation of Microstrip Patch Single Element, 1*2 Array Design and 1*4 Array Design for SART Applications", International Journal of Innovative Science and Research Technology, Volume 5, Issue 8, August – 2020, ISSN No:-2456-2165 pp 1407-1410.
11. K Radhakrishna, Dr. K Sreelakshmi, "Design and Simulation of 4*8 Microstrip Patch Array Design and 8*8 Microstrip Patch Array Design for SART Applications", International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 08 | Aug 2020 ISSN: 2395-0072, pp 4628 - 4631

Conference Papers

1. Manjushree Tamang, Avinash S N, K Sreelakshmi, " An Ku-band transition from Strip line to Microstrip line", International Conference on RF and Wireless – ICon RFW-10, at IETE, Bangalore, 7th – 9th Oct. 2010.
2. Maumita Dutta, Mohammed Yazeen P S , K. Sreelakshmi "Stripline Fixture for Broadband Electromagnetic Material Characterization", ICIECE 2015, at Hyderabad , Andhrapradesh
3. Karthik K S and Sreelakshmi K," Triple Band Frequency Reconfigurable Antenna for Wireless Application", IEEE International Conference on Advances In Electrical, Electronics, Information, Communication And Bioinformatics – 2016, (AEEICB - 2016), on 27th& 28th February 2016, at Prathyusha Engineering College, Chennai
4. Pramodh Kumar, K Sreelakshmi, Sangeetha B and Shiv Narayan, "Metasurface based Low Profile Reconfigurable Antenna", IEEE International conference on Communications and signal processing, April 6th - 8th, 2017, India**, DoI: 978-1-5090-3799-5/17 $31.00©IEEE**
5. Siddesh Kamat, K Sreelakshmi, "Design of Asymmetrical Coupled Line Inter-digital filter for Long Term Evaluation (LTE)-26 band", 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), 19 May - 20 May 2017, Sri Venkateswara College of Engineering, Bengaluru
6. Pooja Arali, Madhusudhan Rao Kothari, Dr. K Sreelakshmi, "Design and simulation of RF receiver for LTE" ,National Conference on Electronics, Signals & Communication (NCESC-17), Dept. of ECE & Dept. of TCE, GSSSIETW, Mysuru, 29th May 2017
7. Siddesh Kamat, K Sreelakshmi, "Ultra wideband LNA for wireless applications", IEEE-2017 International Conference on Intelligent Computing and Control (I2C2), Karpagam College of Engineering, Coimbatore, 23-24th June 2017,
8. Pooja Arali, Madhusudhan Rao Kothari, Dr. K Sreelakshmi, "Design and simulation of RF Receiver for LTE band 28",IEEE-2017 International Conference on Intelligent Computing and Control (I2C2), Karpagam College of Engineering, Coimbatore, 23-24th June 2017,
9. Chetan choudhary, Dr. K Sreelakshmi, "GaN HEMT based Doherty Power Amplifier with network Matching optimization technique for 2.4GHz", 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT 2018), organized by Sri Venkateshwara College of Engineering, Bengaluru, India, on 16th – 17th May 2018.
10. Chetan choudhary, Dr. K Sreelakshmi," Design and Simulation of a 3-Way Doherty Power Amplifier for ISM Band Applications ", IEEE International Conference on Recent Trends in Computational Engineering and Technologies (ICRTCET '18) to be held during 17th – 18th May 2018 at RajaRajeswari College of Engineering Bengaluru, INDIA.
11. T P Mithun, Sreelakshmi K "Design of Monopole CPW-Fed Pentagonal Patch Antenna "3rd International Conference on Electronics, communication, computer technologies and optimization techniques (ICEECCOT-2018) 14-15 December 2018, GSSS Mysuru

12. *Tejaswi Karadi, Sreelakshmi K, Amlesh Kumar Singh* ," Design, optimization and simulation of non-resonant slotted waveguide antenna for X-band", Proceedings of 5th International conference on Computational Systems and Information Technology for Sustainable Solutions (CSITSS – 2021), Dec. 16- 18th, 2021, RVCE.
13. Akshata Baloolad, Dr. K Sreelakshmi "Design, Analysis and Fabrication of Stepped Impedance Micro-strip Low Pass Filter", IEEE 2nd International Conference on Intelligent Technologies (CONIT 2022), K. L. E. Institute of Technology, Hubballi. June 24th-26th, 2022
14. Dhanush S, Dr. K Sreelakshmi, G Ranjith K Dora, Susarla Hari, "LNA Design for LEO Space S-Band Applications", 6th International Conference on "Computational Systems and Information Technology for Sustainable Solutions" [CSITSS-2022] 21–23rd December 2022.
15. Kavya G B Dr. K Sreelakshmi Ramya Naik Purushotham.V, "RADAR bracket moldable structures impact on 77 Ghz radar to reduce sidelobe and backlobe", 7Th International Conference on Microelectronics, Computing, Communication Systems (MCCS 2022), ISVE Ranchi Centre, 9-10th July 2022 at ARTTC, BSNL, Ranchi, 9-10th July 2022.
16. Sushma Subhas Katti, Dr. R. K. Manjunath, Prince Kumar, Shaik Kareemulla, Dr. K Sreelakshmi, "Design and Implementation of Waveguide Filter for Ku- Band Radar, IEEE 2nd International Conference on Intelligent Technologies (CONIT 2022), K. L. E. Institute of Technology, Hubballi. June 24th-26th, 2022
17. Harshavardhan K H, Dr. K Sreelakshmi "Design of C Band Microwave Oscillator", 6th International Conference on "Computational Systems and Information Technology for Sustainable Solutions" [CSITSS-2022] 21–23rd December 2022.
18. Krishna Kumar M, Sreelakshmi K, Shanthi Ashokan, "Design and Simulation of a double balanced Mixer for Radar Applications at X band", Global Conference on Information Technologies and Communications(GCITC) – 2023, 1-3 Dec 2023, REVA University ,Bengaluru, India.
19. Naveen Kumar, Shanthi P, Dr. K Sreelakshmi, "Design and development of Multiband Omnidirectional antenna", IEEE CSITSS 2023, 2 - 4th Nov 2023 at RVCE, Bangalore.
20. Karthik Lalith, Mittal, Shanthi P, K Sreelakshmi, "Dataset creation for analysing Horn Antenna performance: Exploring frequency and Aperture angle variations with python", IEEE CSITSS 2023, 2 - 4th Nov 2023 at RVCE, Bangalore.
21. Chandrakala V, Sreelakshmi K , Roja Reddy B ," A Combination Of OFDM Based Radar Communication System", International Conference on Intelligent and Innovative Technologies in Computing, Electrical and Electronics, 24 and 25 January 2024, B N M Institute of Technology, Bangalore
22. Krishna Kumar M, Sreelakshmi K, Shanthi Ashokan, "Design and Simulation of a double balanced Mixer for Radar Applications at X band", Global Conference on Information Technologies and Communications, (GCITC) – 2023, 1-3 Dec 2023, REVA University ,Bengaluru, India.

Books/Book Chapters

11. Anshula Aithal, Kruthi U. Shetty, Rida Kutty Javed, Mohana, T. Shankar, P. Ramakanth Kumar, and K. Sreelakshmi, "Real-Time Fire and Smoke Detection in Surveillance Videos Using Deep Learning", Book Chapter in **Computational Intelligence in Pattern Recognition, Springer Ebook.** eBook ISBN 978-981-97-8093-8, Print ISBN, 978-981-97-8092-1

Patents [Filed / Published / Granted]: NIL

Completed Research Projects

1. "Growth and Characterization of Novel Nano-Cluster Carbon Based Thin Film Transistors at Room

Temperature", Funded by UGC, New Delhi, from 01.02.2011 for 3 years, with 8.49 lakhs, with Dr. B S Satyanarayana, Principal, RVCE and Dr. T C Thanuja, Associate professor, Dept. of TCE, RVCE as Co Investigators.

2. "Modernization of wireless Communication Laboratory with full-fledged testing and Characterization of passive and active circuits for 5G and Allied Technologies", PI: Dr. K Sreelakshmi, Co PI: Dr. Nagamani K , Co PI :Dr. B Roja Reddy, Funded by AICTE MODROB, Rs.15,97,650/- in year 2021-2022

Ongoing & Completed Consultancy Projects: Nil

Professional Memberships

- Life member ISTE
- Fellow of IETE
- Senior Member IEEE – MTT & APS

Awards & Recognitions

- Best Mentor Recognition from Samsung R&D India, 2019.
- Recognized for scopus indexed publications by RSST on 26.01.2018.
- Recognized for academic excellence on September 9th 2008, by ISTE-RVCE Chapter.
- Honored for publishing papers in International journals on 26th January 2009, by RSST.

Student Supervision

- **Ph.D. Candidates:** 1 scholar waiting for Viva, I scholar awarded from VTU
- **M.Tech/M.Sc. Students:** 01 scholar for MSc Engg under VTU, 02 MTech students for Major Projects.
- **Undergraduate Research Mentees:** (in 2024-25) - 07 mentees submitted Major project reports, 4 mentees working under CCTVR CoE, 4 mentees working for SAMSUNG worklet.

Teaching

Core Courses: [Current year]

- RF Circuits
- Operating systems

Advanced/Lab Courses: --

Professional Roles

- PG Dean (Circuit programs) from Jan 2025 till date
- Head of the department from July 2018 to Jan 2025
- PG Associate Dean Feb.2011 to June 2018

Responsibilities – Institution level

- Coordinating all the activities related to Postgraduate programs
- Facilitated MoU with Samsung R&D, Coordinating and Mentoring SAMSUNG Research worklet execution,

Member of following committees at Institution level

- Research Advisory committee
- Editorial board of College magazine - RVJSTEAM
- Exam board
- Policy review and Advisory committee
- Grading Advisory committee from 2022-23 to 2024-25
- Compliance activities –NIRF, NAAC SFR preparation
- Coordinated of IT Planning, Implementation and Monitoring Group- 2018-19 to 2024-25
- Member in Organizing committee of CSITSS

Responsibilities – department level

Facilitating and coordinating the following activities at department

- Compliance activities – UGC, AICTE, VTU, NAAC, NIRF
- Teaching learning process, student placements, Research process, Curriculum revision of PG and UG, Conduction of extra and co-curricular activities
- Industry institute interaction - renewed MoU of Keysight technologies,
- Faculty and student mentoring,
- Infrastructure creation and maintenance,
- Budget proposals and utilization
- Technical and Office staff mentoring and supervision.

External Connect

- Resource person in 2 days training “Electronics for Non-electronic engineers “at BEL on 27.08.2019
- “Computer hardware and Networking” on 28/09/2021 at RVCE for Bharat Electronics (BEL) employees.
- Electronic Computer Hardware & Networking, at Bharat Electronics (BEL) Bengaluru on 19-05-2022
- Electronic Computer Hardware & Networking, at Bharat Electronics (BEL) Bengaluru on 15.9.23
- Electronic Computer Hardware & Networking, at Bharat Electronics (BEL) Bengaluru on 28.9.2021