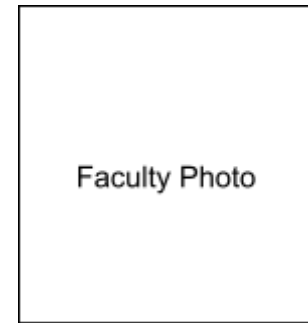


# Faculty Profile



- Dr. Nagaraja G S, IEEE Senior Member (ID: 93317003), is a Professor in the Department of Computer Science and Engineering at R.V. College of Engineering (RVCE), Bengaluru. With over 34 years of teaching and 21 years of research experience. He has served as a member of academic and research committees such as BoS, BoE, and RAC for VTU and other state universities. Dr. Nagaraja is recognized for his significant contributions to academia and research in the field of Computer Science and Engineering. His extensive experience and active involvement in curriculum development, research advisory, and academic evaluation have made him a valued member of various institutional committees. He has guided number of research projects and continues to mentor students and scholars in emerging areas of technology.
- His multidisciplinary expertise and commitment to innovation have played a key role in advancing both academic excellence and practical applications in the domains he specializes in the domain of Computer Networking, with a broad research focus that encompasses Computer Networks, Network Management, Wireless Networks, Cloud Computing, Internet of Things (IoT), Cybersecurity, Computer Architecture, Storage Optimization, Multimedia Communications, and emerging areas like Artificial Intelligence (AI) and Data Science and their real-world applications. His multidisciplinary expertise enables him to contribute effectively to both foundational research and practical innovations across these interconnected fields. He has demonstrated a strong commitment to academic growth, research excellence, and technological advancement. He has been instrumental in fostering industry-academia collaboration and promoting research-driven education. His work spans a broad spectrum of contemporary technologies, enabling impactful contributions to both theoretical and applied aspects of computer science. As a senior academic and researcher, he continues to inspire the next generation of engineers and researchers through his leadership, mentorship, and dedication to lifelong learning.

## Personal Information

- Name: Dr Nagaraja G.S
- Designation : Professor
- Department: [Computer Science and Engineering]
- Email: [nagarajags@rvce.edu.in]
- Phone: [080-68188199]

**ORCID:** <https://orcid.org/0000-0001-5517-7039>

**Google Scholar:**

<https://scholar.google.co.in/citations?user=D6oqEhgAAAAJ&hl=en//orcid>

## Domain of Expertise: Computer Networking

**Research Focus:** Focuses on the design, development, and optimization of next-generation networked systems. His work explores critical aspects of **Computer Networks**, including **Network Management**, **Wireless Communication**, and **Cloud Infrastructure**, with an emphasis on enhancing performance, reliability, and security. He is also deeply involved in research related to the **Internet of Things (IoT)** and **Cybersecurity**, aiming to develop secure, scalable, and intelligent systems for real-world applications. His interdisciplinary research further extends to **Artificial Intelligence (AI)** and **Data Science**, where he investigates data-driven methodologies to address complex challenges across domains

Primary Area: [Computer Networks]

- Allied Areas:

[Networks Management, Wireless Networks, Cloud Computing, Internet of Things , Cyber security, Internet of Things, Cybersecurity, Computer Architecture, Storage Optimization, and Multimedia Communications, Artificial Intelligence (AI) and Data Science]

## Academic Qualifications

- Ph.D.: [Engineering Discipline], [Dr MGR University, Chennai], [2011]
- M.Sc./M.Tech: [Master of Engineering], [Mysuru University], [1996]
- B.E./B.Tech: [Computer Science and Engineering], [Bengaluru University], [1991]

## Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering	Lecturer	2005 to 2007
2.	RV College of Engineering	Assistant Professor	2008 to 2011
3	RV College of Engineering	Associate Professor	2012 to 2013
4	RV College of Engineering	Professor and Associate Dean	2019 to 2024
5	RV College of Engineering	Professor	Sep 2013 to Till Date

## Publications & Patents

### Journal Publications

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2. Pawankumar R, Nagaraja G.S, "Automated Question Tagging Using NLP and Diverse Classifiers ",International Journal of Engineering Research in Computer Science and Engineering,IJERCSE) Vol 11, Issue 10, Page No. 49-5, November 2024.
3. Hitha.S and Nagaraja. G. S., "Precision Agriculture: Machine Learning-Driven Crop Yield Prediction in India", International Journal of Innovative Research in Technology (IJIRT), Gujarat, Vol.11, Issue-4, pp.1177-1183, September 2024.
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6. Lavanya Naik, Nagaraja G.S "Analytics based Seamless Automation of Key Performance Indicator Setting Process", International Journal of Engineering Research & Technology (IJERT), Vol. 12, issue 09, September-2023 IJCRT, June 2024
7. Sangeetha S, Nagaraja G.S, "Heterogeneous IoT based Cloud Data Retrieval System", International Journal of Engineering Research & Technology (IJERT), Vol. 12 Issue 09, September-2023.,
8. Nagaraja G S, Shrihari, Varsha T, "Design and Implementation of Broadband Services for Small Scale Organization", International Journal for Research in Applied Science & Engineering Technology, Volume 11 Issue VI Jun 2023.
9. Bhargava K P1, Suyog P2, G S Nagaraja, "Real-World Analysis of Smart City Integrated
10. Services using High-Speed Network Technologies", International Journal for Research in Applied Science & Engineering Technology, Volume 11, Issue V, May 2023.
11. Nagaraja G.S, Vivek B.A, "High-Speed Networks for Information Communication Technologies for Disaster Recovery Operations", International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653, pp.955-963, Volume 11 Issue V May 2023.
12. Vanishree K, Nagaraja G.S, "Framework modelling for effective precision agriculture using predictive analytics", Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition) ISSN : 1671-5497, Vol: 42 Issue: 02-2023, pp.245-256, Feb-2023.
13. Vanishree K, Nagaraja G.S, "Lora based smart agriculture monitoring and automated irrigation system", Jilin Daxue Xuebao (Gongxueban)/Journal of Jilin University (Engineering and Technology Edition) ISSN : 1671-5497, Vol: 42, pp.199-208, Feb-2023
14. Vanishree K, Nagaraja G.S, "Novel Framework for Secure Data Aggregation in Precision Agriculture with Extensive Energy Efficiency", Hindawi Journal of Computer Networks and Communications, Vol.2023, pp.01-11, Feb 2023.
15. Sukrutha C Basappa, Nagaraja G S, "Accessory authentication on NFC enabled product using three pass AES algorithm", International Research Journal of Engineering and Technology (IRJET)", Volume: 09 Issue: 06 , pp. 2905-2909, Jun 2022.
16. Shankaramma, Nagaraja G.S, "Iot based sensors in smart city applications ", "The Seybold Report ", Vol.17, DOI 10.5281/zenodo.6801217, pp.2075-2083, July 2022.
17. Pavan K R, Dr. Nagaraja G.S, "Mocking upstream services", Gradiva review journal", issn no : 0363-8057, volume 8 issue 7 July- 2022,
18. G. S. Nagaraja, Kruthi P.R., Shivani Deshpande, "Exploratory Data Analysis of Network Traffic", International Journal of Innovative Science and Research Technology", Volume 7, Issue 7, ISSN No:-2456-2165, pp.1690-1693, July – 2022.

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20. Vijay Raj, Namita Bilagi, G S Nagaraja, "International Research Journal of Engineering and Technology (IRJET)", Volume: 10 Issue: 01, pp.95-99, Jan 2023
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25. Khushi Talesra, Nagaraja G.S, "Low-Code Platform for Application Development", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 16, Number 5 (2021) pp. 346-35.( SCOPUS)
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34. Vanishree K, Nagaraja G.S, "Emerging Line of Research Approach in Precision Agriculture: An Insight Study (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 12, No. 2, 2021, PP.304-317. (WoS)
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## Conference Papers

1. Sohail Bagawan, Dr.Nagaraja G.S, "Develop an On - Device LLM Android Application", 8<sup>th</sup> IEEE International Conference –CSITSS, 7-9<sup>th</sup> November, 2024 @ RVCE, Bengaluru-59, India.
2. Chaitra Patil, Nagaraja G.S ""DOH Integrator Tool ",8<sup>th</sup> IEEE International Conference –CSITSS, 7-9<sup>th</sup> November, 2024 @ RVCE, Bengaluru-59, India.
3. Nagaraj G.S, Shankaramma, "Framework Analysis and Zero Trust Security Issues in Contemporary Network Systems", 8<sup>th</sup> IEEE International Conference –CSITSS, 7-9<sup>th</sup> November, 2024 @ RVCE, Bengaluru-59, India.
4. Nitya Kulkarni, Nagaraja G.S, B. G. Sudarshan, S. C. Prasanna Kumar , S. Venkatesh "Comparative study of deep learning models to classify Arrhythmia", 8<sup>th</sup> IEEE International Conference –CSITSS, 7-9<sup>th</sup> November, 2024 @ RVCE, Bengaluru-59, India.
5. Shivalingappa P, Dr.Nagaraja G.S , "Systematic Review of Security for Health Records using Blockchain ",IEEE International Conference on Smart Technologies for Sustainable Development Goals (ICSTSDG), 7-8<sup>th</sup> November-2024, Tamilnadu.
6. Pawan Kumar R, Nagaraja G.S, "automated question tagging using nlp and diverse classifiers", "International Conference on Engineering & Technology (ICET24), Salem, Tamil Nadu, pp.62-66, October-2024.
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12. Varshitha Bysani, Ananya G, Vanishree K, Nagaraja G.S, "farmEasy- A web portal for farmers", 7th IEEE International Conference CSITSS-2023, 2-4th November, 2023 at RVCE, Bengaluru.
13. Shri Hari, Nagaraja G S, "Cloud Web Services based Fleet Management System", 7th IEEE International Conference CSITSS-2023, 2-4th November, 2023 at RVCE, Bengaluru.

14. Dr. Nagaraja G S, B Mithra Varun , P V Koundinya, Yashas M S, "Prediction of Diabetes Risk based on Machine Learning Algorithms", International Conference on Artificial Intelligence and Machine Learning in Applied Biotechnology (AIMLBIO), 8-10 Dec 2022, RVCE, Bangalore, India.
15. Vanishree K, Kedar Bhandarkar, Sudhanva T Manur, Syed Farhan, Leela Ganesh, Dr. G S Nagaraja, "LoRa based Smart Agriculture Monitoring and Automated Irrigation System", International Conference on Artificial Intelligence and Machine Learning in Applied Biotechnology (AIMLBIO), 8-10 , 2022, RVCE, Bangalore, India.
16. Amit Kumar Singh, Nagarathna H, Laxmi, R Varsha Bantia, Kirti Gangadhar Himbandi, Vanishree K, Dr. G S Nagaraja , "Home Automation using Internet of Things", International Conference on Artificial Intelligence and Machine Learning in Applied Biotechnology (AIMLBIO), 8-10 Dec 2022, RVCE, Bangalore, India.
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19. Reshma Jakabal, Dr. Nagaraja G S, "A Solution for Prediction and Tracking of Alzheimer Disease using Secure and Energy Efficient Internet of-Things", 4<sup>th</sup> International Conference on Cybernetics, Cognition and Machine Learning Application (ICCCMLA), IEEE Conference #56841 held in Goa from 8th - 9th October 2022, India.
20. Vanishree K, Nidhi H Halappanavar, Suraj Rajshekhar Mukkannavar, N M Nishant, Nagaraja G S, "Comparative study of Machine learning Approaches on Cropland Mapping" 6<sup>th</sup> International Conference on CSITSS-2022 @ RVCE, 16-18<sup>th</sup> December, 2022, India.
21. Shankaramma, Nagaraja G.S, "Methods of Storage Intrusion Mitigation with Data transport Security Tunnels", 7th International Conference on Microelectronics, Computing & Communication Systems (MCCS-2022), Jharkhand, India during July. 9 -10th , 2022.
22. Shreyas Srinath, Nagaraja G S, Ramesh Shahabadkar, " A detailed analysis of lightweight Cryptographic techniques on Internet-of-Things", 5<sup>th</sup> Edition IEEE International Conference on Computational Systems and Information Technology for Sustainable Solution(CSITSS-2021), 16-18 December-2021, pp.155-160.
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25. SessaKalyur, Nagaraja G.S, "Efficient Graph algorithms for mapping to tasks to processors" 2nd EAI International Conference on Big data innovation for sustainable cognitive computing, UBICNET, 10th Feb 2020. (Springer).
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27. SessaKalyur, Nagaraja G.S "CALIPER: A Coarse Grain Parallel Performance Estimator and Predictor", International Conference for Emerging Technologies in Computing iCETiC, London, UK. August 19–20, 2020. (Springer).
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51. G S Nagaraja, Rajashekara Murthy S, Deepak T S, " Content based video retrieval using support vector machine classification", IEEE International conference on applied and theoretical computing and communication technology, October 29-31<sup>st</sup> , pp.823-829, BIET, Davangere, 2015. IEEE
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## Books/Book Chapters

1. Ramesh Bilagi and G.S Nagaraja, "Model Building and data analytics for process conformance using Machine Learning", Ensemble Machine Learning: Advances in research and applications, pp.215, Vol 1, October 2024, Nova Publisher.
2. Praveena T, Nagaraja G.S, "Study on Social-sine Cosine Algorithm-based Cross Layer Resource Allocation in Wireless Networks", Recent Advances in Mathematical Research and Computer Science Vol. 1, pp.41-55, October, 2021. (Springer)
3. Vanishree K, Nagaraja G.S., "Novel secure for On-Field Sensors for Data Aggregation in precision Agriculture", Software Engineering and Algorithms, pp.426-436, July-2021. (Springer).
4. SessaKalyur, Nagaraja G.S", A Taxonomy of Methods and Models used in Program Transformation and Parallelization", Ubiquitous Communications and Network Computing, 2019(Springer- link-Scopus).
5. Hamsha K, Nagaraja G.S, " Threshold Cryptography based Light Weight Key management Technique for Hierarchical WSNs", Ubiquitous Communications and Network 2019" (Springer-Link-Scopus).

6. Nagaraja G.S, Shreyas Srinath, "Security Architecture for IOT based home automation", Smart Innovation, Systems and Technologies, Springer.
7. Nagaraja G.S, Anjan K Koundinya, Thippeswamy G, Vinay V Hegde " Spatial Data Infrastructures for Urban Governance using High Performance Computing for Smart City Applications ", Smart Innovation, Systems and Technologies, 978-981-32-9689-3, Springer..
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## Patents **[Published]**

1. Patent research article was published and Granted with titled "A system for estimating the inherent parallelism and speedup of sequential programs" (10) DE 20 2022 104 088 U1 2022.09.0). 2022.

## **R & D Grants & Consultancy Projects**

### **Ongoing & Completed Research Projects**

- ["PULSELIFE - Multiparameter Diagnosing Device" Ongoing] – Funding Agency: [NIDHI – PRAYAS Programme of Department of Science and Technology, National Science and Technology Entrepreneurship Board (NSTEDB)], Duration: [2025], Role: [CO-PI].
- ["FPGA and SoCs Boards" Ongoing ] – Funding Agency: [Intel Technologies], Duration: [2022], Role: [PI].
- ["Collaborative development project on Silkworm Seed production" Completed ] – Funding Agency: [Central Silk Board], Duration: [2021], Role: [CO-PI].
- ["Solar Ironing Cart" Completed ] –, Funding Agency: [National Institute of advanced studies Iisc], Duration: [2020], Role: [Co-PI].
- ["Effective Multimedia Information retrieval using Indexing Technique"Completed ] – Funding Agency: [UGC], Duration: [2013-2016], Role: [PI].

### **Ongoing & Completed Consultancy Projects**

- [CCNA Module Training -Ongoing] – Funding Agency: [CISCO Netacad], Duration: [2025], Role: [PI].
- [Research Projects Review-Ongoing ] – Funding Agency: [Ideal Educraft technologies], Duration: [2024-2025], Role: [PI].
- [CCNA Module Training- Completed] – Funding Agency: [CISCO Netacad], Duration: [2022-24], Role: [PI].
- [Computer Communication Networks and Cyber Security- Completed] – Funding Agency: [BEL], Duration: [2022-23], Role: [CO-PI].
- [CCNA Module Training- Completed] – Funding Agency: [CISCO Netacad], Duration: [2013-17], Role: [PI]

## **Professional Memberships**

- [Membership Body, IEEE, ISTE ]

## Awards & Recognitions

- [Instructor Excellence Advanced Level Award], [CISCO Netacad], [2013,2015]
- [National Award "Rajarambapu Patil" for promising engineering teacher for creative work done in technical education ] [2018]
- [Instructor years of service for five years of active participation and dedicated service] [2022]
- [IEEE-CS Bengaluru Chapter presented Teaching excellence award] [2023]
- [2024 Instructor Excellence Advanced Level Award in recognition of advanced level instructor excellence and overall contributions to Cisco Networking Academy] [2025]

## Student Supervision

- **Ph.D. Candidates:** [09] Graduated [
- **M.Tech/M.Sc. Students:** [75]
- **Undergraduate Research Mentees:** [100]

## Professional Roles

- **Editorial Board:** [Springer]
- **Chair/Committee Member:** [ Chair, Committee Member e.g., *IEEE International Conference on CSITSS*, *IEEE International Conference on ICDDS* ]

## Teaching

### Core Courses: [Current semester]

- [CY245T] [Computer Networks]
- [MCN222IA] [Advanced Network Programming]

### Advanced/Lab Courses:

- [Advanced Network Programming-MCN222IA]

## Professional Roles

## Responsibilities

- **Academic:** [Professor and Chief Time Table Officer]
- **Administrative:** [Worked as PG Associate Dean- Computer Science and Engineering Dept]

## External Connect

- Member of BoS – NIE Mysuru. DSCE, REVU, CRMU, GATE, SJBIT,RRIT, Bengaluru
- BoE- BMSCE, DSCE Bengaluru
- IEEE, CISCO, Intel Technologies