# Faculty Profile Brief Profile (Few Paragraphs)

Faculty Photo

#### **Personal Information**

Name: Dr. SUMA B

• Designation: Associate Professor

Department: Computer Science and Engineering

• Email: sumab\_rao@rvce.edu.in

• **Phone:** [Office Phone]

Google Scholar: <a href="https://scholar.google.co.in/citations?user=WCkDTpUAAAAJ&hl=en">https://scholar.google.co.in/citations?user=WCkDTpUAAAAJ&hl=en</a>

 $\textbf{ResearchGate} : \underline{https://www.researchgate.net/profile/Suma-B}$ 

**Researcher ID:** AAS-5823-2021 **ORCID:** <u>0000-0001-7337-1855</u>

## **Domain of Expertise**

#### **Research Focus**

Primary Area: Artificial Intelligence \* Machine Learning, Data mining,

Allied Areas:

Data Hiding, Algorithm Analysis

## **Academic Qualifications**

• Ph.D.: Computer Science and Engineering, VTU, 2023.

M.Tech: Computer Science and Engineering, NITK Surathkal, 2004

• B.E./B.Tech: Computer Science and Engineering, Mangalore University], 1998

## **Professional Experience**

Experience					
S.No	Institute/College/Industry	Job Title	Duration (From- To)		
1.	RVCE	Associate Professor	Dec 2024 –till date		
2.	RVCE	Assistant. Professor	Feb 2011- Dec 2024		
3	NMAMIT , Nitte	Assistant. Professor	July 2007-June 2010		

4	NMAMIT , Nitte	Sr. Lecturer	Jan 2005- July 2007
5	NMAMIT , Nitte	Lecturer	Nov 1998- Jan 2005

## **Publications & Patents**

#### **Journal Publications**

- 1. Sannidhi, Pratiksha Narasimha Nayak G, Nandini Moonka, Dr. Suma B, Dr. Rajashree Shettar , "Airport Management System with Passport Verification using OpenCV", International Journal for Research Trends and Innovation, Volume 9, Issue 6, pp. 36-44, June 2024
- 2. V. S. A. Raju and S. B, "Network Intrusion Detection for IoT-Botnet Attacks Using ML Algorithms," 7th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India, pp. 1-6, 2023
- 3. Suma B, Shobha G, "Fractional salp swarm algorithm: An association rule based privacy-preserving strategy for data sanitization", Journal of Information Security and Applications, Volume 68, 2022, ISSN 103224, pp.2214-2126- Scopus-Q1
- 4. Suma B., Shobha G., "Privacy preserving association rule hiding using border based approach", Indonesian Journal of Electrical Engineering and Computer Science (IJEECS), vol. 23, no.2, pp. 1137-1145, 2021 .-Scopus-Q3
- 5. Suma B., Shobha G., "Association rule hiding using integer linear programming", International Journal of Electrical and Computer Engineering (IJECE), vol. 11, no. 4, pp. 3451-3458, 2021 -Scopus-Q2, ISSN: 2088-8708.
- 6. Nikhil Sandilya, Sahil Sharma, Neetanshu Tyagi, Ashwini KB, Padmashree T, Suma B, "Secure Data Management and Analysis System for Employee Teams: A Spring-based Approach with Role Management and Visualization Capabilities", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 12, Issue 6, ,pp: 278-282, 2023
- 7. A S Prajwal Babu ,Suma B , "Developing an ETL Pipeline for Data Analysis", International Journal of Computer Applications Technology and Research Volume 11–Issue 08, 315-319, 2022, ISSN:-2319–8656
- 8. Tejamallik K. S., Suma B. "Web Based Network Element Resource and Information Tool", International Journal of Advance Research, Ideas and Innovations in Technology, Volume 7, Issue 3, pp-983-986.,2021
- 9. Rujula Singh R, Nikhil S Nayak, Dr.Sownmyarani CN, Suma B ,"A Study on Messaging Systems- Kafka, KubeMQ, IBMMQ and RabbitMQ" International Journal of Computer Engineering and Technology, Volume 12, Issue 2, 2021
- 10. Sathvik K R, Suma B, "The Perfect Order Index and Ways to Improve Using Technology" International Journal of Science and Research (IJSR), Volume 10, Issue 7, 2021
- 11. Athish Tejashwi Kumar, Suma B, "RBAC Model using Attribute Based Encryption for Secure Cloud Storage", Wutan Huatan Jisuan Jishu, Vol 16, Issue 7, pp 33-37, 2020.
- 12. Sudhanva Patil1, Suma B, "A System for Generating and Rendering Map Components", International Research Journal of Engineering and Technology, Volume: 07 Issue: 05 ,pp: 7585-7589,2020
- 13. Yogeshwari, Suma B, "A Review on Data Streaming and Frameworks used in Data Stream Processing", International Research Journal of Engineering and Technology, Volume 7.Isuue 4, pp: 4252- 4257,2020
- 14. Pushpavathi N,Suma B, "Setting Emarketing Spots in Business-to-Business Ecommerce", International Research Journal of Engineering and Technology , Volume: 07 Issue: , pp: 2395-0072,2020
- 15. Shridhar S Chini, Suma B, Anguru Suresh, "Development of Java Based SDK for Network Protocol Analysis", International Journal for Scientific Research and Development, Volume: 5, Issue 7, pp: 1092-1096,2017
- 16. Veda.D, Suma B, "Automatic road extraction from satellite image by Difference of Gaussian and convolution overlap add method", International Journal of Advanced Networking & Applications, 239-243, 2016,,
- 17. Surendra Tiwari, Suma B," A Hybrid Approach for Re-current Frequent Itemset Mining", International Journal for Scientific Research and Development, Volume 2, Issue 5, 2014 ,445-446
- 18. Suma B, Gayathri C ,"Scalable Probe Tool Design for Active Packet Loss Measurement using Geometric Distribution", International Journal of Research in Computer and Communication Technology, Vol 3,Issue 1, pp: 132-137, 2014.

- 19. Suma B," Association Rule Hiding Methodologies: A Survey", International Journal of Engineering Research & Technology, Vol 2, Issue 6, pp:181-185, 2013.
- 20. Suma B., Mangala C N, "FLGMM Algorithm for Brain MR Image Segmentation", International Journal of Latest Research in Science and Technology , Vol 2,Issue 2 , pp: 2278-5299, 2013,. ISSN (Online):2278-5299

#### **Conference Papers**

- 1. Abhishek R,Aditya S,S Prajwal Narayana,Suma B,An Empirical Study of ResNet50 Hyperparameter Tuning for Plant Disease Classification, 8th IEEE International Conference on Computational Systems & Information Technology for Sustainable Solutions,(CSITSS),November, 2024.
- 2. Hardik Hiraman Pawar, Karan S, Suma B, Predictive Analytics in Cardiovascular and Diabetes Risk: An Integrated Machine Learning Approach, 8th IEEE International Conference on Computational Systems & Information Technology for Sustainable Solutions, (CSITSS), November, 2024.
- 3. Buchepalli Praneeth, Ashutosh Kumar Singh, Jyothika K Raju, Mohana, Suma B , "Natural Language Interface for Data Visualization: Harnessing the Power of Large Language Models", The Fifteenth International Conference On Computing, Communication And Networking Technologies, June 24 28, 2024, IIT- Mandi, H.P. India
- 4. Krishna Kulkarni, Suma B, "A Study of Risk Assessment and Prioritization in Public Cloud", 3rd International Conference on Emerging Trends in Engineering and Technology, Sandip Institute of Engineering and management, Sandip foundation, Nashik, July, 2022.
- 5. B. Suma, G. Shobha, "A Greedy Approach to Hide Sensitive Frequent Itemsets with Reduced Side Effects", Proceedings of International Conference on Remote Engineering and Virtual Instrumentation REV19, BMSCE, Bengaluru, pp. 849-858,2019.- Scopus-Q4
- 6. Veda.D, Suma B, "Automatic road extraction from satellite image by Difference of Gaussian and convolution overlap add method", International Journal of Advanced Networking & Applications, 1st International Conference on Innovations in Computing & Networking (ICICN16), CSE, RRCE, pp; 239-243,2016.
- 7. Mahitha G, Suma B, "Chaos Based Image Encryption and Decryption", Current Trends in Computer Science and Engineering, Jain University, Bangalore, pp. 219-225, 2012.
- 8. Suma B., Vinodh Kumar. S, "Filtering Injected False Data in Wireless Sensor Networks using a Bandwidth Efficient Cooperative Authentication Scheme", National Conference on Recent Advances in Technology and Engineering, 27-28th, T. John Institute of Technology, Bangalore, pp:156-161, 2010.

### **Books/Book Chapters**

- 1. B. Suma, G. Shobha, "A Greedy Approach to Hide Sensitive Frequent Itemsets with Reduced Side Effects", In book: Cyber-physical Systems and Digital Twins, volume 80, pp.849-858, part of Lecture Notes in Networks and Systems book series, 2019.
- 2. B. Suma ,G. Shobha . "Integer Linear Programming Approach for Hiding Sensitive Association Rules ",Techniques and Innovation in Engineering Research and Technology Vol. 5, Page 73-94, 2023

#### Patents [Filed / Published / Granted]

Nil

# R & Grants & Consultancy Projects

# **Ongoing & Completed Research Projects**

Nil

# **Ongoing & Completed Consultancy Projects**

- Image Blur Estimation-[AI] (( SamSung Phase-5 Workelt, 2024-25)
- Detect User Actions on Devices and Monitor Performance parameters (SamSung Phase-4 Worklet, 2023-24)
- Development of Owner Registration and Vehicle Tracking System (ATDXT PTE LTD, 1,58,337/-,2023-24)

## **Professional Memberships**

IEEE, ISTE

# **Awards & Recognitions**

- NPTEL Discipline Star Certificate (Computer Science and Engineering)- 2022
- Top performer in FDP, IIT Bombay, 2016

## **Student Supervision**

- Ph.D. Candidates: [Number] : Nil
- M.Tech/M.Sc. Students: [Number]:01
- Undergraduate Research Mentees: [Number]:22

## **Professional Roles**

- Editorial Board: Nil
- Chair/Committee Member: Nil
- Industry Advisor: Nil

## **Teaching**

#### Core Courses: [Current semester]

- [CD343AI] Design and Analysis of Algorithms
- [CS363AI] [Compiler Design]
- Advanced/Lab Courses:
- CD343AI] Design and Analysis of Algorithms Lab
- Professional Roles

# Responsibilities

- Academic: Member of BoE
- Administrative: Department SAP Co-ordinatore

#### **External Connect**

Nil