Faculty Profile

Brief Profile (Few Paragraphs)

Personal Information

• Name: Dr B M Sagar

Designation: Professor and Dean Student Affairs
Department: Information Science and Engineering

• Email: sagarbm@rvce.edu.in

Phone: 080-68188128

Google Scholar / ResearchGate / LinkedIn: [Link if applicable]/ ORCID: [Link]

https://scholar.google.com/citations?user=qJcNR50AAAAJ&hl=en/

ResearchGate: https://www.researchgate.net/profile/Sagar-Bm

LinkedIn: https://www.linkedin.com/in/sagarbm/

ORCID Link: https://orcid.org/0000-0001-5037-3786

Domain of Expertise

Research Focus

• **Primary Area:** Natural Language Processing and Data Analytics

• Allied Areas:

o Large Language Models, Algorithms

Academic Qualifications

- Ph.D.: [Computer Science], [Visvesvaraya Technological University], [2023] (Machine Learning Model for Agricultural crop yield prediction)
- Ph.D: [Computer Science], [Avinashilingam University], [2013], (Knowledge based Information Retrieval for Syntactic Analysis of Kannada Script)
- PG. Dip: [Natural Language Processing], [Annamalai University], [2014]
- B.E./B.Teeh: [Computer Science and Engineering], [Kuvempu University], [2000]
- M.Tech: [Computer Science and Engineering], [Visvesvaraya Technological University], [2005]

Faculty Photo

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering	Lecturer	2004-2008
2.	RV College of Engineering	Assistant Professor	2008-2012
3.	RV College of Engineering	Associate Professor	2012-2020
4.	RV College of Engineering	Head of the Department	2018-2025
5.	RV College of Engineering	Professor	2020-2025
6.	RV College of Engineering	Dean Student Affairs and Professor	2025-Till Date

Publications & Patents

- B.M. Sagar, Dr. Shobha G, Dr. Ramakanth Kumar P, Converting printed Kannada text Image file to Machine editable format using Database approach, is published for the International Journal of Computers, ISSN: 1998-4308, Page Number: 171-174, 2008
- B.M. Sagar, Dr. Shobha G, Dr. Ramakanth Kumar P, OCR for printed Kannada text to Machine editable format using Database approach, WSEAS Transactions on Computers, ISSN: 1109-2750 Issue 6, Volume 7, June 2008 Page Number 766-769.
 http://www.wseas.us/e-library/transactions/computers/2008/27-379.pdf
- 3 B.M. Sagar, Dr. Shobha G, Dr. Ramakanth Kumar P, Solving the Noun Phrase and Verb Phrase Agreement in Kannada Sentences, International Journal of Computer Theory and Engineering (IJCTE)ISSN: 1793-8201, Vol. 1, No. 3, Aug 2009, Page Number: 288-292. The paper is listed in Engineering & Technology Digital Library
- **B M Sagar**, Dr. Shobha G, Dr. Ramakanth Kumar O, *Context Free Grammar (CFG) Analysis for simple Kannada sentences*, Special Issue of International Journal of Computer and Communication technology, Volume number 1 Issue 2,3,4., 2010, Page Number 32-37

- **B M Sagar**, Lohith M, Chinna M Eranna, Ashwin Srigiri, **An Efficient Network Readiness Assessment Agent to Deploy Various Media Rich Applications**, IFRSA's **International Journal Of Computing**, Vol1, issue 2, **April 2011**, Page Number 158-165,

 ISSN (Print) : 2231-2153(URL: http://ifrsa.org/images/issue2/six.pdf)
- 6 B M Sagar, Dr. Shobha G, Dr. Ramakanth Kumar, Post processing Automatically correcting errors made by Optical Character Recognition, published in the journal, International Journal of Information Science and Applications (IJISA), Paper Id: 6364, May 2011 issue.
- 7. B M Sagar, Jayanth G H, Design and Development of Error Tracking and Debugging Tool in Android Platform, International Journal of Computing, Volume 2, Issue 1, January 2012 Page Number 163 to 167
- 8. B M Sagar, Rajiv Reddy V S, "Blacklisting Mischievous Users in Pseudonymous Networks and check status on Android", International Journal Of Mobile And Adhoc Network (IJMAN) ISSN (Online) 2231:6825 ISSN (Print)2249–202X, Page Number: 73 to 75, Vol 2, Issue 1, Feb 2012
- 9. B M Sagar, Keith D, Pooja, Praveen M P, A Survey On Enhancement And Object Detection Techniques For Underwater Images, International Research Journal of Signal Processing IRJSP, Vol 03, Issue 01, January-April 2012, ISSN: 2249-6505, Page Number: 114-117
- 10. B M Sagar, Dr. Shobha G, Dr. Ramakanth Kumar P, Kannada Morphology for Syntactical Analysis, International Journal of Computational Linguistics and Natural Language Processing, Vol 1, Issue 2, September 2012, ISSN: 2279-0756, Page Number 44 to 50.
- 11. B M Sagar, Dr. Shobha G, Dr. Ramakanth Kumar P, Bala Arun Survey on grammar generation methods for Natural Languages, International Journal of Computational Linguistics and Natural Language Processing, Vol 2, Issue 1, January 2013, ISSN: 2279-0756, Page Number 197-202

- 12. B M Sagar, Jayalakshmi N, Virtual Machine Scheduling For Architectural Shared Resources in Open Stack Based Cloud, International Journal of Emerging Science and Engineering (IJESE) ISSN: 2319–6378, Volume-1, Issue-7, May 2013
- 13. B M Sagar, Vinod O, Hash-Based String Matching Algorithm For Network Intrusion Prevention systems (NIPS), International Journal on Advanced Computer Theory and Engineering (IJACTE), ISSN (Print): 2319 2526, Volume-2, Issue-2, 2013, Page Number: 55-59
- 14. Dr. B.M. Sagar, Rajeeva K R, Quick Response Code for Fast Detection and Recognition of Information, International Journal of Emerging Technology and Advanced Engineering Website: www.ijetae.com (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 4, Issue 2, February 2014) Page Number 271 275
- 15. Dr. B M Sagar, Prof. Rajashekhara Murthy, Ashwini Gadag, Survey on Paraphrase Extraction Techniques for Kannada, International Journal of Advanced Research in Computer And Communication Engineering, ISSN (Online): 2278-1021, ISSN(Print): 2319-5940, Volume 3, Issue 6, June 2014
- 16. Dr. B.M. Sagar, Pavithra H, An overview of Software Defined Networking, International Journal of Science, Engineering and Technology Research, ISSN: 2278 7798, Volume 3, Issue 11, November-2014 Page Number 3053-3055.
- 17. Dr. B M Sagar, Sheik Nousheen Taj, Survey on NMS supporting Network Elements Implementing Heterogeneous Protocols, International Journal of Science and Research (IJSR), ISSN (Online): 2319-7064, Impact Factor (2013): 4.438, Volume 4, Issue 5, May 2015.
- 18. Dr. B M Sagar, Amit P Chigadani, Apoorv Mishra, Proposition of Smart Kitchen using Message Queuing Telemetry Transport Protocol, International Journal of Engineering Research in Computer Science and Engineering (IJERCSE) Vol 3, Issue 5, May 2016 URL: http://ijercse.com/papers/v3/i5/2.pdf
- 19. Sindhu D.V, Dr. Sagar B M, A Case Study On Linguistic Divergences in Kannada-Telugu Machine Translation Perceptive, Published in International

- conference on Computational System and Information Technology for Sustainable solution- CSITTS 2016, from Oct 6th to 8th **2016**. Organized by RV College of Engineering Bengaluru. Page No: 95-99. Listed in IEEE explorer: 978-1-5090-1022-6/16/\$31.00 ©2016IEEE
- 20. Sindhu D.V, Dr. Sagar B M, Study on Machine translation approaches for Indian languages and their challenges, Accepted for the presentation in International Conference on Electronics, Communication, Computer and Optimization Techniques, on Dec 9th to 10th 2016. Organized by GSSS Institute of Engineering and Technology for women. Submitted paper will be published in IEEE Digital library. Awarded as best paper in the conference.
- 21. Ashwini Gadag, Dr. Sagar B M, N-Gram Based Paraphrase Generator from Large text Document, Published in International conference on Computational System and Information Technology for Sustainable solution- CSITTS 2016, from Oct 6th to 8th 2016. Organized by RV College of Engineering Bengaluru. Page No.91-94, Listed in IEEE explorer: 978-1-5090-1022-6/16/\$31.00 ©2016IEEE
- 22. Ashwini Gadag, Sagar B M, Paraphrase generator using dictionary lookup for kannada language, Published in 2nd International Conference on Next Generation Computing Technologies- NGCT 2016, from Oct 14th to 16th 2016. Organized by Centre for Information Technologies, UPES, Dehradun, India. Page No. 25, IEEE Conference ID: 39694.
- 23. Ashwini Gadag, **Dr. Sagar B M**, **A survey on different methods of Paraphrasing**, Accepted for the presentation in International Conference on Electronics, Communication, Computer and Optimization Techniques, on Dec 9th to 10th 2016. Organized by GSSS Institute of Engineering and Technology for women. Submitted paper will be published in IEEE Digital library. Awarded as best paper in the conference.

- 24. Dr.B. M. Sagar, Saraswathi. K, Greenhouse Monitoring for Betel Leaf Vine Cultivation using Iot and Wireless Sensor Network, International Journal of Engineering Science and Computing, May 2017, Pg Num 11537 to 11541, Volume 7 Issue No.5
- 25. Dr. B M Sagar, Saurabh Anand (JC Penny, Bangalore), Pallavi Singh (JC Penny, Bangalore), An Ascendable and Efficacious Platform for Data Analytics, International Conference on Data Management, Analytics & Innovation 2018, 19 21 January 2018, www.icdmai.org, Institute of Industrial and Computer Management and Research, Pune, (IICMR) Pune University, India.
- **26. Dr. B M Sagar**, Pallavi Singh, Saurabh Anada, **An Ascendable and Efficacious Platform for Data Analytics**, CSI Journal of Computing (ICI Indexed and Digitally Archived) Special Issue, "ICDMAI, Pune, 19-21 January 2018, **April 2018** ", e-ISSN:2277-7091, Page Num: 9-18
- 27. Vinutha H.P., Poornima B., Sagar B.M. Detection of Outliers Using Interquartile Range Technique from Intrusion Dataset. In: Satapathy S., Tavares J., Bhateja V., Mohanty J. (eds) Information and Decision Sciences. Advances in Intelligent Systems and Computing, vol 701. Springer, Singapore, DOI-https://doi.org/10.1007/978-981-10-7563-6_53, Print ISBN 978-981-10-7562-9, Online ISBN 978-981-10-7563-6, 2018
- 28. Anand S., Singh P., Sagar B.M. Working with Cassandra Database. In: Satapathy S., Tavares J., Bhateja V., Mohanty J. (eds) Information and Decision Sciences. Advances in Intelligent Systems and Computing, vol 701. Springer, Singapore, DOI-https://doi.org/10.1007/978-981-10-7563-6_55, Print ISBN 978-981-10-7562-9, Online ISBN 978-981-10-7563-6, 2018

29. Pandurang S Kambali, Sanjana Suri, Dr. B M Sagar, Distributed Representation of Words in Vector Space for Kannada Language, 3rd International Conference on

- Computational Systems and Information Technology for Sustainable Solutions (CSITSS 2018), to be held in December 20th, 21st and 22nd **2018** at R V College of Engineering, Bengaluru 560059, Karnataka, India
- **30.** Arun Kumar Rajappa, Dr. B M Sagar, Machine Learning Framework for Software Fault Prediction, Third International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT) 14-15, **December 2018**, Page Number 873 to 877
- 31. Meghana Kishore Murthy, **Dr. B M Sagar**, **Comparative Study of prediction Models for Flight departure delays in airports**, in International Conference on Artificial Intelligence, Machine Learning and Big Data Engineering held at Bengaluru on 14th April **2019**.
- 32. Nishanth S, Manu S Rao, Sagar BM, Padmshree T, Cauvery N K, Performance of CPUs and GPUs on Deep Learning Models For Heterogeneous Datasets, Proceedings of the Sixth International Conference on Electronics, Communication and Aerospace Technology (ICECA 2022) DVD Part Number: CFP22J88-DVD; ISBN: 978-1-6654-8270-7, 978-1-6654-8271-4/22/\$31.00 ©2022 IEEE, Page Number 946-953

Agriculture Data Analytics in Crop Yield Estimation: A Critical Review

https://ijeecs.iaescore.com/index.php/IJEECS/article/view/13056

B.M. Sagar, Cauvery N K, Indonesian Journal of Electrical Engineering and Computer Science (Scopus Indexed), Vol 12, No 3, December 2018, pp. 1087~1093, ISSN: 2502-4752, DOI: 10.11591/ijeecs.v12.i3.pp1087-1093

Improving Crop Productivity Through A Crop Recommendation System Using Ensembling Technique

B M Sagar, Nidhi H Kulkarni Dr. G N Srinivasan, Dr.N K Cauvery, 3rd IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions 2018, Page Number 114-119, ISBN Number: ISBN: 978-1-5386-6078-2

A Machine Learning Approach to Crop Yield Prediction

B. M. Sagar, Aditya S Sreerama, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 05 | May 2020, p-ISSN: 2395-0072.

Vertical Farm Management Analysis in Metropolitan Areas Using IoT and Cloud

http://www.iraj.in/journal/journal_file/journal_pdf/3-668-160490266214-17.pdf

B.M. Sagar, Cauvery N K Lakshitha Karthik N, International Journal of Advanced Computational Engineering and Networking, ISSN(p): 2320-2106, ISSN(e): 2321-2063 Volume-8, Issue-7, Jul.-2020

Performance Analysis on Machine Learning Algorithms with Deep Learning Model for Crop Yield Prediction

Sagar, B.M, Shetty, S.A., Padmashree, T., Cauvery, N.K. (2021) In: Jeena Jacob, I., Kolandapalayam Shanmugam, S., Piramuthu, S., Falkowski-Gilski, P. (eds) Data Intelligence and Cognitive Informatics. Algorithms for Intelligent Systems. Springer, Singapore

Analysis and Prediction of Cotton Yield with Fertilizer Recommendation Using Gradient Boost Algorithm

Sagar, B.M., Cauvery, N.K., Abbi, P., Vismita, N., Pranava, B., Bhat, P.A. (2022), In: Joshi, A., Mahmud, M., Ragel, R.G., Thakur, N.V. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2020). Lecture Notes in Networks and Systems, vol 191. Springer, Singapore

Rice and Wheat Yield prediction in India using Decision tree and Random forest

B M Sagar, Dr. NK Cauvery, Dr.Padmashree T, Dr. R. Rajkumar, International Conference on Big Data, Computer Science and Information Technology (ICBDCSIT-22), 5th June 2022, Bengaluru, India – Published in the journal Computational Intelligence and Machine Learning, Vol-3 Issue-2, October 2022, PP.1-8, ISSN: 2582-7464 (Online)

Forecasting Crop Yield with Machine Learning Techniques and Deep Neural Network

https://doi.org/10.1007/978-3-031-31164-2_45

B M Sagar, Chaitra, B.G., Cauvery, N.K., Padmashree, T. (2023). In: Sharma, H., Saha, A.K., Prasad, M. (eds) Proceedings of International Conference on Intelligent Vision and Computing (ICIVC 2022). ICIVC 2022. Proceedings in Adaptation, Learning and Optimization, vol 17. Springer, Cham

Sagar BM, A. S. Grandhi, S. Umair, B. S. N. Yaswanth, A and Ravi, P. T, "Real-Time Text Extraction and Video Interpreter System," 2024 8th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS), Bengaluru, India, 2024, pp. 1-5, doi: 10.1109/CSITSS64042.2024.10816843.

Sagar BM, Hrithik Maddirala, Nehashri Poojar S V, Nisarga V, Merin Meleet, Ravi Sankar Guntur, "Custom Architecture for Effective Semantic App Search: A Systematic Approach," 2024 8th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS), Bengaluru, India, 2024, pp. 1-6, doi: 10.1109/CSITSS64042.2024.10816842.

Patents [Filed]

1. [Artificial Intelligence (AI)-Powered Customizable Clothing System with AI Generated Music and Method Thereof], [202541057481], [2025].

R & Grants & Consultancy Projects

Ongoing & Completed Research Projects

• [A New Framework for Analysis, Generation and Translation in Indian Languages (Kannada and Telugu)] – Funding Agency: [TDIL (Technology Development for Indian Languages), New Delhi], Duration: [2014-2017], Role: [Principle Investigator].

Ongoing & Completed Consultancy Projects

- **[Zero Knowledge Proof]** Funding Agency: [*JP Morgan Chase Bank Limited, Bengaluru*], Duration: [2023-2024], Role: [PI].
- [Annotate the Images] Funding Agency: [RoadMetrics], Duration: [2021-2021], Role: [PI].
- [ePRo App / Web portal development for Healthcare sector] Funding Agency: [SyMetric Systems], Duration: [2020-2020]
- [Meta Data Extraction] Funding Agency: [CTA.AI], Duration: [2021-2021], Role: [PI].

Samsung Research Projects

Sl. No.	Title of the Project	Duration
1.	Develop an Android based OpenXR application using the extension XR EXTX overlay	June 2025
2	Doodle assisted object image generation	July 2024 - Dec 2024
3	Semantic App Search	Jan 2023 - July 2023
4	Contextual Emotion Detection in Text	Sep 2021 - Jan 2022
5	Chat Bot for e-commerce platform	Sep 2021 - Jan 2022
6	Demographic Detection	Jan 2020 - June 2020

Professional Memberships

- **IEEE Professional Member:** Membership No.: 99793548
- Life Member of ISTE (The Indian Society for Technical Education): Membership No.: LM-46456 Organization for promoting the quality and standards in Technical education.
- Life Member of CSI (Computer Society of India): Membership No.: 00133682 CSI is a professional body aiming to improve teaching and learning by organizing workshops, seminars and paper publications.

Awards & Recognitions

• Completed One Year Leadership Training Program titled: Get Ready for Opportunities at Work (GROW) Leadership training programme, from RV Educational Institutions during 2022-23

- Fostered a robust coding culture which benefitted students across the campus.
- Organized numerous events including Hackathons, Capture the flags, competitive coding rounds, sessions of web development, machine learning and other technologies.
- Conducted pre-placement sessions at other institutions, highlighting the importance of coding platforms.

Student Supervision - NiL

Professional Roles

- Editorial Board:
 - o Reviewer for Agronomy added to WoS
 - o Reviewer for Annual Journal for Agriculture
 - o Reviewer Manuscript International Journal of Agricultural Sustainability
 - o Reviewer Clarivate Applied Artificial Intelligence
 - o Reviewer for the MDPI Journals
 - o Reviewer in the Annual International Conference on Recent Trends in Healthcare Innovation (AICRTHI) 2024, held on 24 & 25 October 2024,
- General Chair The 8th International Conference on Computational Systems and Information Technology for Sustainable Solutions (CSITSS) is scheduled for November 7-9, 2024

Teaching

Core Courses: II Semester

• CS222IA: Principles of Programming Using C

Professional Roles

Responsibilities

• Academic: Dean Student Affairs

• Administrative:

Sl. No.	Name of the Committee	Member	Main Coordinator
1.	Policy Review and Advisory	Yes	-
	Committee (PRAC)		
2.	Compliance / Offline and Online	-	Yes
	Documentation Committee (AICTE, UGC, VTU, DTE, NIRF, NAAC)		Along with Vice Principal
3.	Innovation Cell and Industry	Yes	_
<i>J</i> .	Connect	163	_
4.	Academic Planning and Monitoring	-	Yes
	Committee		Along with Dean
			Academics
5.	Student Related Committees	-	CAT, NSS, NCC, Center
			for Gandhian Studies,

			Science Forum, Magazine Committee
6.	Information and Public Relation	Yes	-
	Committee		
7.	Grievance Redressal Cell	Yes	-
8.	Anti-Ragging/ Drug	-	Yes
	Abuse/Smoking / Alcohol – Review		
	Committee and College Level		
9.	Institution Innovation Council	Yes	

External Connect

• Member of BoS / BoE

No.	Event	Institution/Organization	
1	BoE Member	Ramaiah Institute of Technology, Bengaluru	
		ISE, SJBIT, Bengaluru	
2	Nominee - Member for Board	Bapuji Institute of Engineering and Technology,	
	of Studies, ISE, AIML & CSBS	Davangere	
	Dept		
3	Member for Board of Studies	Adichunchanagiri University, Bellur	
4	VTU Member for Board of	CSE, Bangalore Institute of Technology	
	Studies	AIML, Vidyavardhaka College of Engineering	
		 ISE, New Horizon College of Engineering, 	
		Bengaluru.	
		• AIML, Siddaganga Institute of Technology,	
		Tumkur	
		ISE, PES College of Engineering, Mandya	
		• Dept. of CSE – AIML, Global Academy of	
		Technology, Bengaluru	