Faculty Profile Brief Profile (Few Paragraphs)

Faculty Photo

Personal Information

Name: Dr. Sneha M

• **Designation:** Associate Professor

Department: Computer Science and Engineering

• Email: sneham@rvce.edu.in

• Phone:

Google Scholar: <u>Dr. Sneha M - Google Scholar</u>

ResearchGate: https://www.researchgate.net/profile/Sneha-Hegde-3

LinkedIn: https://in.linkedin.com/in/dr-sneha-m-32124365

ORCID: <u>Sneha M (0000-0003-0755-4930) - ORCID</u>

Domain of Expertise

Research Focus

• Primary Area: Computer Networks, Network Security

Allied Areas:

o Software Defined Networks Networks Management, Wireless Networks, Internet of Things, Cyber security, Internet of Things, Artificial Intelligence (AI) in Computer Networks

Academic Qualifications

• Ph.D.: [CSE], [VTU], [2024][Thesis title: Mitigating Security attacks using ES ML libraries and Improving the Delay and Throughput of a Network]

• **M.Tech**: [CNE], [VTU], [2013]

• **B.E.**: [CSE], [VTU], [2006]

Professional Experience

Experience				
S.No	Institute/College/Industry	Job Title	Duration (From- To)	
1.	HCL Technologies Limited	Software Engineer	2006-2008	
2.	RVCE	Assistant Professor	Sep 2013- Dec 2024	

3. RVCE Associate Professor From Dec 202	4
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Publications & Patents

Journal Publications

- 1. Sneha M and Mohan H S, "Diffusion And Time Analysis For Aes Candidates" in the journal International Journal of Mathematics and Computer Applications Research (IJMCAR), ISSN(Print):2249-6955; ISSN(Online):2249-8060; Volume:3; Issue:2; Impact Factor(JCC): 4.1736 in JUNE 2013 edition and have got the Best Paper Award.
- 2. Sneha M and Mohan H S, "Imrovements Of Rijndael Algorithmthrough Keymultiplication" in the journal International Journal of Scientific & Engineering Research (IJSER), ISSN 2229-5518, Volume 4, Issue 6, July 2013 in JULY 2013 edition.
- 3. Shivaprasad Balaji and Sneha M, "Simulation of Environment of Geographically Distributed Server Nodes for Testing of Load Balancing Algorithms", in the journal International Journal of Scientific Engineering and Research (IJSER), ISSN (Online): 2347-3878, Impact Factor (2014): 3.05, Volume 3 Issue 8, August 2015, page number 140-142.
- **4.** Sneha.M, "Performance Analysis of RAIDs in Storage Area Network", Issue ISBN: 973-93-80889-44-8 ,International Journal of Computer Applications (0975 8887) Volume 126 No.13, September 2015.
- 5. Shakti Kumar, Sneha M., Dr. Shobha G., "A Novel Approach for Standardizing Authentication Schemes in OpenDayLight Controller", ISSN (Online): 2328-3580, American International Journal of Research in Science, Technology, Engineering & Mathematics, 23(1), June-August, 2018, pp. 251-256.
- 6. Manu B and Sneha M, "Advanced flow monitoring technique for intrusion tolerance in SDN" has been accepted in the Tenth International Conference on Advances in Computer Science and Application CSA 2019, the conference is jointly organized by the IDES and the Association of Computer Electrical Electronics and Communication Engineers (ACEECom), May 24-25, 2019; in Bengaluru, India. (Scopus Indexed)
- 7. Shreyas K K, Abhishek H P, Sneha M, Shobha G, Deepak Kumar "Integration of Third party Routing Stack to NetScaler CPX", in Advances in Science, Technology and Engineering Systems Journal (ASTESJ), Volume 4, Issue 6, Page No 192-195, Dec 2019. (Scopus Indexed).
- **8.** Apoorva G O and Sneha M "Tracking of Intruder using Video Analytics", International Journal of Innovative Science and Research Technology, Volume 6, Issue 6, June 2021, ISSN No:-2456-2165
- 9. Sneha Mahabaleshwar, Shobha Gangadhar, Sharath Krishnamurthy, "Anomaly detection for software defined datacenter networks using X-Pack", Indonesian Journal of Electrical Engineering and Computer Science Vol. 31, No. 2, August 2023, pp. 995~1007 ISSN: 2502-4752, DOI: 10.11591/ijeecs.v31.i2.pp995-1007. (Q3 Scopus indexed).

- 10. Sneha, M., Kumar, A.K., Hegde, N.V. et al. "RADS: a real-time anomaly detection model for software-defined networks using machine learning". Int. J. Inf. Secur. (2023). https://doi.org/10.1007/s10207-023-00724-9. (Q1, Web of Science, Scopus indexed).
- **11.** Pragathi B.C., Hrithik Maddirala, Sneha M. . Implementing an Effective Infrastructure Monitoring Solution with Prometheus and Grafana. International Journal of Computer Applications. 186, 38 (Sep 2024), 7-15. DOI=10.5120/ijca2024923873

Conference Papers

- **1.** Sneha.M, Prakruthi.S.N and Siddlingappagouda C Biradar "TCP Performance Analysis in Wireless Mobile Ad Hoc Networks ",Two day National Conference on 'Computer Networking and Soft Computing NCNS-12 organised by Dept. of CSE on 6th and 7th November 2012 at SIT Tumkur.
- 2. Sneha.M and Prakruthi.S.N "A review on Video Distribution Techniques Over WiMAX Networks for m-Health And e-Health Applications", 5th National Conference on Artificial Intelligence and Software Engineering AISE-2012 held on 2nd November 2012 by Dept. of ISE, New Horizon College of Engineering and Research Foundation.
- 3. Sneha M et. al., "Darideepa: A Mobile Application for Bus Notification System", International Conference on Contemporary Computing and Informatics (IC3I) 2014, sponsored by IEEE, 27 & 29 November 2014, SJCE, Mysuru, India. (Web of Science, Scopus Indexed)
- **4.** A. Bansal, D. N. Patel, K. Rishabh and M. Sneha, "Stock Prediction Model using Seq2Seq and Bi-directional LSTM," 2022 4th International Conference on Circuits, Control, Communication and Computing (I4C), Bangalore, India, 2022, pp. 275-278, doi: 10.1109/I4C57141.2022.10057690. (Scopus Indexed)
- 5. Buchepalli Praneeth, Varun S Sambanni, Shobha G, Sneha M, "Remote Packet Monitoring: Real-Time Network Analysis from Anywhere", 2nd IEEE International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT-2024), 4-6 January 2024, REVA university Bengaluru.

Books/Book Chapters

1. Sneha M, Dr Kotaro Kotaoka and Dr. Shobha G, "BO-RL: Buffer Optimization in Data Plane using Reinforcement Learning", The 35th International Conference on

Advanced Information Networking and Applications (AINA-2021)

Ryerson University, Toronto, Canada, May 12 - 14, 2021. And the paper got published in Advanced Information Networking and Applications Series title: Lecture Notes in Networks and Systems, Springer International Publishing. (Scopus Indexed)

Patents [Filed / Published / Granted]

- 1. Topic: Method, System and Apparatus for Providing Efficient and Secured Authentication. Authors: Prof. Sneha M, Dr. Shobha G, Mr. Shakti Kumar, Mr. Rahul M V. (2018) (**Granted 2024**).
- 2. System and Method to support primary education for students in regional language using Artificial Intelligence. Authors: Dr. Deepamala N, Prof. Sneha M, Dr. Shobha G, Spoorthi V, Anish S, Pavan Kumar C Banasode, Pranav Ilikarlapalli, Jayanth C, S Varun (2024) (**Published**).

R &D Grants & Consultancy Projects

Ongoing & Completed Research Projects

- 1. Research project on Software Defined Networks from CISCO systems "Tenant-managed AAA in Open Daylight Controller" (2016-2017). PI: [CO-PI]
- Research project titled "AI based virtual assistant to support primary education for rural students in regional language", grant of Rs. 10lakhs from IITI DRISHTI CPS Foundation under the NM-ICP scheme. (2023-2024).
- 3. Research business project with NOKIA Bengaluru on "Design and development of automation log analysis tool for customer issues troubleshooting" March 2024.

Ongoing & Completed Consultancy Projects

 Consultancy Project by CITRIX "Integrating third party routing stacks on NetScalar CPX".(2017-2018).[CO-PI]

Professional Memberships

IEEE, ISTE

Awards & Recognitions

- Secured VTU Second rank in MTech CNE 2011–23
- Best Project of the year award as guide in the state level project competition conducted by the Karnataka State Council for Science and Technology, held at Alva's Institute of Engineering and Technology, Moodubidire on 11th and 12th August 2023
- 3rd place in Best Ph D thesis award in International Conference CSITSS 2024 held RV College of Engineering on 7 to 9 Nov 2024.

Student Supervision

• M.Tech Students: [05]

• Undergraduate Research Mentees: [33]

Professional Roles

- Chair/Committee Member: [Coordinated EduAlThon a 48 hour hackathon]
- Industry Advisor: [Company/Startup Name]

Teaching

Core Courses: [Current semester]

- [CS125AIB] [Introduction to Web Programming]
- [CS363AI] [Compiler Design]

Advanced/Lab Courses:

Professional Roles

Responsibilities

- Academic: [Semester Incharge for 3rd year BE CSE, CY, CD, NPTEL coordinator, Quiklrn Coordinator, NOKIA SPoC]
- Administrative: [Compiler Design Lab incharge]

External Connect