



Name Poonam Ghuli

Designation Professor of Practice

Qualification PhD in Computer Science

Experience 18

Academic: 18

Industry: NA

Courses Taught: Database Management Systems, Logic Design and Computer Organization, Computer Networks, Data Structures, Discrete Mathematics, Programming in C, Object Oriented Programming using Java, Theory of Computation, Advanced Algorithms

Areas of Research: Data Analytics, Distributed Clustering Algorithms

Certifications and Achievements:

1. **Appointed as Judge for evaluating Science Projects** demonstrated by Govt school Children in RamNagar on 28th Feb 2020 and this event was organized by Caring with Colour NGO.
2. Was a **Resource Person and Delivered a talk** to One week FDP on "Opportunities and Challenges on Post pandemic Era: An Overview" from 10th August 2020 to 14th August 2020 organized by the department of Artificial Intelligence and Machine Learning, BMS Institute of Technology and Management
3. Completed 12 weeks NPTEL certification course on Object Oriented System Development using UML and Java Patterns Aug-Dec 2020.
4. Completed Coursera Certification for the course "Assessment in Higher Education: Professional Development for Teachers" by Duke University, "Learning to Teach Online" by The University of New South Wales (UNSW), Sydney.
5. Foundation Program in ICT in Education March 8 to April 12 2018 EduMOOC conducted by IIT Bombay
6. Pedagogy for Online and Blended Teaching Learning Process May 3 to May 30 2018 EduMOOC conducted by IIT Bombay.
7. Completed NPTEL Certification Course on Design and Analysis of Algorithms
8. Received NPTEL certificate of Appreciation for best performing Mentor
9. Attended Global Partnership meet on Cybersecurity and Forensic Analysis Summit, National Institute of Advanced Studies (NIAS), Indian Institute of Science Campus, Bangalore on 30th August 2018
10. A One day workshop on "Theoretical Aspects of Fuzzy C-Means Clustering" held at the Department of Studies in Computer Science, University of Mysore, Mysuru on 11th February, 2017.
11. A two day workshop on "Python Programming and Data Science and IOT" from 27th-28th January 2017 in RNSIT Bengaluru.
12. A Six days workshop on "Pedagogical Skills Development Training Programme" from 4th July 2016 to 9th July 2016 in RVCE, Bengaluru.
13. A three days Symposium EECS-2016 at IISc, Bengaluru from April 28-30 2016.
14. A 15 days "MSR(Microsoft Research) summer school on Machine Learning" in IISc Bangalore.



Key Publications:

1. Shivakumar. C1, Dr. Siddhaling Urolagin 2, Dr.Poonam Ghuli, "Context Storage Using Cloud-Based Mongodb With Rule-Based RETE Algorithm", *IT in Industry*, Vol. 9, No.2, pp.1022-1030, April 2021.
2. Dr. Poonam Ghuli, Manoj Kartik R, Mohammed Amaan, Mridul Mohta, N Kruthik Bhushan, Shobha G, "Recommendation System for SmartMart-A Virtual Supermarket", *Advances in Science, Technology and Engineering Systems Journal* Vol. 5, No. 6, 1408-1413, Dec (2020). **(Scopus Indexed)**.
3. Dr. Poonam Ghuli, Dr. Shobha G, Kirthana T, "Deep Learning driven Human Sentiment Analysis", *Journal of Seybold Report*, Volume 15, Issue 7, July 2020, pp. 756-761.
4. Dr. Poonam Ghuli, Dr. Anupama H S, "Creation of Open Educational Resource (OER) Activity: Flipping the Classroom with Moodle", *Journal of Seybold Report*, Volume 15, Issue 7, July 2020, pp. 965-979.
5. Pallavi Deshwal, Poonam Ghuli, " DevOps: Concept, Technology and Tools", *International Journal of Computer Sciences and Engineering*, Vol.8, Issue 6, June 2020, pp 73-78. **(Indian Citation Index)**
6. Shiv Sagar Shetty, Poonam Ghuli, "Log Analyzer for Update Manager", *International Journal of Engineering and Advanced Technology (IJEAT)*, Vol. 9, Issue 5, June 2020, pp 328-330.
7. Althaf S., Suresha N.2, Pooja K.S., Jeelani H.Muddebihal, Poonam Ghuli, Ramakanth Kumar P., "Study of Plant Phenotype using Image Segmentation Techniques", *International Journal of Computer Sciences and Engineering (IJCSE)* , Vol. 8 Issue 5, May 2020, pp.23-30. **(Indian Citation Index)**
8. Apurb Rajdhan, Milan Sai, Avi Agarwal, Dundigalla Ravi, Dr. Poonam Ghuli, "Heart Disease Prediction using Machine Learning Algorithms", *International Journal of Engineering Research & Technology (IJERT)*, Vol. 9 Issue 04, April-2020, pp. 659-662.
9. Sharnya Shankar, Shubra Verma, Sriya Elavarthy3, Trishala Kiran, Dr. Poonam Ghuli, "Analysis and Prediction of chronic Kidney Disease", *International Research Journal of Engineering Technology (IRJET)*, Vol.7, Issue 5, May 2020, pp. 4536-4541.
10. Poonam Ghuli, Shashank BN, Athri G Rao, "Development of framework for Detecting Smoking Scene in video clips", *Indonesian Journal of Electrical Engineering and Computer Science*, Vol 13(1), Jan 2019, pp 22-26, ISSN: 2502-4752, DOI: 10.11591/ijeecs.v13.i1.pp22-26 **(Scopus Indexed)**.
11. **Ravikiran M D, Poonam Ghuli**, "Novel Approach to Seat Matrix Prediction using Hadoop ", **International Journal of Computer Science and Engineering**, Vol.07 , Issue.13 , pp.25-32, May-2019, **DOI:** <https://doi.org/10.26438/ijcse/v7si13.2532>. (UGC Approved, UGC J. No. 63193)(Indian Citation Index)
12. Raghav Rastogi, Shreyansh Nahata, Poonam Ghuli, Pratiba D, Dr. Shobha G, "Anomaly Detection in Log Records." *Indonesian Journal of Electrical Engineering and Computer Science*, Vol 10(1), April 2018, pp 343-347 **(Scopus Indexed)**.
13. Poonam Ghuli, Swapana Rao P, Harsha S, Rajashree Shettar "A Novel method to search information through MultiAgent Search and Retrive operation using Content and Context based Search" in *IJCET*, Vol 4, Issue 3, May-June 2013 pp 512-518.
14. Poonam Ghuli, Rajashree Shettar," A Novel Approach to Implement a Shopping Agent on a Scalable Web Crawler", in *IJARCCE*, Vol-3, Issue 1, January 2014 ISSN: 2319-5940, pp 5326-5330.



15. Sushmita Patil, Poonam Ghuli, "A Scalable Random Forest Approach for Electrical Load Calculation for Household", IJSETR, Vol-3, Issue 13, June 2014, ISSN: 2319-8885, pp 2835-2838.
16. Chinnabbaiah R, Poonam G, "Intrusion Detection in Heterogeneous Wireless Sensor Networks with Liveliness Proficient Node Localization Algorithm", in IJARCCE, Vol-3, Issue 6, June 2014, ISSN: 2319-5940, pp 5835-5840.
17. Poonam G, Archit Shukla, Raj Kiran, Sheraaz Jason, Rajashree Shettar, "Multidimensional Canopy Clustering on Iterative MapReduce Framework Using Elefig Tool" Taylor and Francis IETE Journal of Research, Vol-61, Issue 1, Jan 2015, pp 14-21. **(SCI Indexed and Scopus Indexed)**
18. Pavitra M K, Poonam Ghuli, "A Novel Approach for Reducing Energy Consumption Using K-Medoids in Clustering Based WSN", IJSR, Vol-4, Issue 6, June 2015, ISSN: 2319-8885, pp 2279-2282.
19. Poonam Ghuli, Maanas Prabhakar, Rajashree Shettar, "A Comprehensive Survey on Centroid Selection Strategies for Distributed K-means Clustering Algorithm", International Journal of Computer Applications, vol-125(5), Sept 2015, pp 36-42.
20. Jayasankar R, Poonam Ghuli, "Cloud Computing Cost and Negotiation: A Survey", International Journal of Computer Applications, vol-129(10), Nov 2015, pp 8-11.
21. Poonam Ghuli, Tarishi Gupta, "Comprehensive study on Global Navigation Satellite Systems (GNSS)", Quest Journals, "Journal of Software Engineering and Simulation", Vol 3(2), May 2016, pp 01-06, ISSN(Online) :2321-3795 ISSN (Print):2321-3809
22. Poonam Ghuli, Sony Hovale, "Survey Paper on Recommendation System using Data Mining Techniques", International Journal Of Engineering And Computer Science, ISSN: 2319-7242, Vol 5(5), May 2016, pp- 16697-16699.
23. Poonam Ghuli, Shri Lakshmi G S, " Design and Development of Timesheet Management System", Indian Journal of Science and Technology, Vol 10(27), DOI: 10.17485/ijst/2017/v10i27/115683, July 2017. **(Web of Science Indexed)**
24. Poonam Ghuli, Urvashi Priyam Kumar, Rajashree Shettar, "A Review on Blockchain Application for Decentralized Decision of Ownership of IoT Devices", Advances in Computational Sciences and Technology, Vol 10(8), Aug 2017, pp.2519-2525, ISSN 0973-6107

National/International Conferences:

1. Dr. Shanta Rangswamy, Dr. Poonam Ghuli, Dr. Nagendra Gupta, Dr. K N Subramanyam, "Exploring Supply Chain Management using BlockChain and Machine Learning - A Survey", International Conference on Mainstream Block Chain Implementation (ICOMBI), Feb 2020.
2. Poonam Ghuli, Amruta Kulkarni and Deepa Kalburgi, "Design of Predictive Model for Healthcare Assistance using Voice Recognition" 2nd International Conference on Computational Systems and Information Technology for Sustainable Solution, Nov 2017, pp 61-64, ISBN:978-1-5386-2044-1. **(Scopus Indexed)**
3. Poonam Ghuli, Raghav Rastogi, Akash A, Pratiba D, Shobha G, "Design and Development of Generic Web Based Framework for Log Analysis", 2016 IEEE Region 10 Conference (TENCON), Technologies for Smart Nation Singapore, 22-23 Nov 2016, pp. 232-236, doi: 10.1109/TENCON.2016.7847996. **(Scopus Indexed)**



4. Poonam Ghuli, Syed Touqeer Pasha, "A Survey on Energy Efficiency in Smartphones: A Survey on GPS Energy Conservation", National Conference on Engineering, Technology and Management, RVCE, Bangalore, April 2016.
5. Poonam Ghuli, Rajashree Shettar, "A novel approach to implement a shop bot on distributed web crawler", 4th IEEE International Advance Computing Conference-2014(IACC-2014), ISBN: 978-1-4799-2571-1, pp 882-886, Gurgaon 21-22 Feb 2014. **(Scopus Indexed)**
6. Poonam Ghuli, Rajashree Shettar, Scaling up detection of similar contents using Mapreduce framework" published in Fifth International Conference on Advances in Recent Technologies in Communication and Computing- ARTCom 2013, ,Elsevier Publication , ISBN 978-81-910691-8-3, pp 195-200,ACEEE Bangalore on 21st Sept 2013.
7. Poonam Ghuli and Dr. Rajashree Shettar "Similar Thesis Detection In A Distributed Environment" at International Conference on Mathematical Modeling and Applied Soft Computing, vol.2, pp 739-746, Coimbatore, India, July 2012.
8. Poonam Ghuli, Atanu Ghosh, Rajashree Shettar, "A Collaborative Filtering Recommendation Engine in a Distributed Environment", IEEE International Conference on Contemporary Computing and Informatics, SJCE, Mysore India, IC3I-2014, 27-29 Nov 2014, pp 568-574. This **paper is accepted as Invited Talk at the Conference. (Scopus Indexed)**

Consultancy:

- A Consultancy completed for the topic "**Lawful VOIP surveillance using deep packet inspection**" by Nihon Communication Solutions Pvt. Ltd in January 2015. Amount sanctioned (1 Lakh 10 Thousand INR)
- "**Development of Augmented Reality using Tango**" and "**Development of Isometric Model from Floor plan**" are two consultancy projects with Insta-Kitchen-Modular Kitchens and Wardrobes, Lalbagh, Bengaluru.
- Involved in **Samsung Prism Worklet** titled "**Answer by Bixby -Spam Detection**" along with Dr. Rajashree Shettar
- Involved in **Samsung Prism Worklet** titled "**System Metric Forecasting (Analysis and Prediction using Deep Learning)**" along with Dr. Rajashree Shettar
- Involved in the **WIRIN project "SDV in a box- Global AV Simulator"** along with Dr. Soumya A, Prof. Shwetha S.
- Involved in consultancy work from **SCII Pvt. Ltd. Tumkuru** regarding "**Design and Development of Recommender system Virtual Supermarket model**" along with Dr. Shobha G. from Feb 2020.
-

Research Proposal:

1. Worked on research Proposal received by Citrix, India Pvt. Ltd. in October 2015 on "Development of Generic Log Analyzer" for which working as Principal Investigator.
2. Worked on Research Project namely "**Anomaly Detection in Log files**" funded by **Cisco Systems- India**. Amount sanctioned (7.5 Lakh)



Book Chapter

- Poonam G, Raksha Shenoy, Shankararama Sharma, Rajashree Shettar, "**Realization of Optimized Clustering Algorithm on RHadoop**", is accepted as a book chapter in the book titled, "**NoSQL: Database for Storage and Retrieval of Data in Cloud**" and will be published in January 2017. Publisher CRC Press, Taylor and Francis Group.
- Natarajan, A., Kannan, A., Belagali, V., Pai, V.N., Shettar, R., Ghuli, P. (2022). Spam Detection Over Call Transcript Using Deep Learning. In: Arai, K. (eds) Proceedings of the Future Technologies Conference (FTC) 2021, Volume 2. FTC 2021. Lecture Notes in Networks and Systems, vol 359. Springer, Cham. https://doi.org/10.1007/978-3-030-89880-9_10

Training Industry Persons

- Training provided to Sahaj Software Solutions, Bengaluru on "Basics of Machine Learning" in the Month of July 2017
- Training provided on Introduction of Machine Learning Algorithms for BEL employees. **Amount Received INR 4,32,000 with GST**

