

PERSONAL PROFILE

Dr. B. Sathish Babu
Professor and HoD, Dept. of AI & ML,
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EDUCATION DETAILS:

Ph.D	Indian Institute of Science, Bangalore, India Area of research: Security in Mobile and Wireless Networks <i>Thesis: A Dynamic Security & Authentication System for Mobile Transactions: A Cognitive Agents Based Approach (Selected as best Ph.D. thesis from BITES-Karnataka, year 2009).</i> Lab: Protocol Engineering Technology Year: 2005 to 2009
M.E.	Computer Science and Engineering Institute: BMS College of Engineering, Bangalore, University: Bangalore University, Year: 1994 to 1995
B.E.	Computer Science and Engineering Institute: Sri Siddartha Institute of Technology, Tumkur University: Bangalore University Year: 1986 to 1990

RESEARCH INTERESTS:

Cognitive agents based control solutions for Networks
Grid Computing
Cloud Computing Scheduling and Security Issues
Context-aware Trust issues in Ubiquitous Computing

Privacy issues in WSN
Opportunistic Computing
Big Data and Analytics
AI and Machine learning
Quantum Computing

TEACHING INTERESTS:

Computer Networks
Cryptography
Information and Network security
Communication Protocol Engineering
Grid and Cloud Computing

AI and Machine Learning
Artificial Neural Networks
Deep Learning
Quantum Computing
Data structures and Data Analysis

PROFESSIONAL EXPERIENCE: (32 Years)

Employer	Position/Designation	From Date	To Date
R V College of Engineering – Bengaluru	Professor and HoD, Dept. of AIML	10-12-2021	Till date
R V College of Engineering – Bengaluru	Professor in Dept. of CSE	26-7-2017	09-12-2021
Siddaganga Institute of Technology-Tumkur	Professor	01-07-2014	21-07-2017
Siddaganga Institute of Technology-Tumkur	Professor and Head	01-07-2011	31-06-2014
Siddaganga Institute of Technology-Tumkur	Professor	03-03-2010	30-06-2011
Siddaganga Institute of Technology-Tumkur	Associate Professor	07-05-2002	02-03-2010
Siddaganga Institute of Technology-Tumkur	Assistant Professor and HOD(i/c) [16-16-12-2000 to 21-04-2002]	6-11-1998	06-05-2002
Siddaganga Institute of Technology-Tumkur	Lecturer	26-9-1997	5-11-1998
Sri Siddartha Institute of Technology-Tumkur	Lecturer	18-2-1991	25-9-1997
FORMER VISITING FACULTY AT CENTRE FOR CONTINUING EDUCATION, INDIAN INSTITUTE OF SCIENCE, BANGALORE.			

LIST OF INTERNATIONAL CONFERENCE PUBLICATIONS:

1. P. Venkataram, B. Sathish Babu, Basavaraj Talwar, M. K. Naveen, *A Method of Intrusion Detection for E-payment Systems in mobile e-Commerce*, 6th WSEAS Intl. Conference on Applied Informatics and Communications (AIC 06), Greece, August, 2006.
2. P. Venkataram, B. Sathish Babu, M. K. Naveen, Samyama Gunjal, *A Method of Fraud & Intrusion Detection for E-payment Systems in Mobile e-Commerce*, In the Proc. of 26th IEEE Intl. Performance Computing and Communications Conference, New Orleans, Louisville, pp. 401, USA, April 11-13, 2007.
3. B. Sathish Babu and P. Venkataram, *Transaction Based Authentication Scheme for Mobile Communication: A Cognitive Agent Based Approach*, In the Proc. of 21st IEEE Intl. Parallel and Distributed Processing Symposium, Long Beach, California, pp. 1- 8, USA, March 26-30, 2007.
4. B. Sathish Babu and P. Venkataram, *An authentication scheme for personalized mobile multimedia services: A cognitive agents based approach*, In the Proc. of IEEE-CSI Future Generation Communication and Networking (FGCN 2007), Jiju island, pp. 167 - 172, Korea, Dec. 6-8, 2007.
5. P. Venkataram and B. Sathish Babu, *An authentication scheme for ubiquitous commerce: A cognitive agents based approach*, In the Proc. of IEEE Network Operations and Management Symposium Workshops, 2008. NOMS Workshops 2008, pp. 248-256, Brazil, Apr. 11, 2008.
6. Rohini B.R. and Sathish Babu B, *Modeling k-anonymity framework for the proximity-based privacy protection in context-aware LBS*, CIIT-2011, 07th-08th Nov. 2011, Pune. India.

7. Sadanand R. Inamdar, Dr. Satish Babu B. and Dr. Ravi M. Yadahalli , *Smart Antenna System using Cross Layer Design in Wireless Ad hoc Networks: Trends and Challenges* , ICN-2011, 23rd-25th, Sept. 2011, REC, Bhalki. India.
8. Mahesh Kumar K.M. and Sathish Babu B, *Intelligent Data Replication in Wireless Grid* , ICN-2011, 23rd-25th, Sept. 2011, REC, Bhalki. India.
9. Jayashree N and Sathish Babu B, *Steiner Tree-based Decentralization Mechanism (STDM) for Privacy Protection in Wireless Sensor Network* , ICIP-2011, 5th-7th Aug., 2011, Bangalore.India.
10. B. Sathish Babu and Pallapa Venkataram, *A Trust Model for Routing in MANETs: A Cognitive Agents Based Approach* , WorldComp-2011, 18th-21st July. 2011, Las Vegas, USA.
11. Sadanand R. Inamdar, Dr. Satish Babu B. and Dr. Ravi M. Yadahalli., *Exploiting smart antennas features and using cross layer design to enhance performance in wireless ad hoc networks* , CETIT-2011, May 20th-22nd, 2011, VTU, Belgaum.
12. Bhargavi K and Sathish Babu B, *CAs-based QoS Scheme for Remote Health Monitoring over WMSN* , ADCONS 2011, NIT, Surathkal.
13. Keerthi M and Dr. B. Satish Babu, *An Improved FCM's Clustering Protocol for Wireless Sensor Networks*, International Conference on Information Technology, Electronics and Communications (ICITEC-2012), March 3 –4, 2012, Bangalore, India, Pages 140-143.
14. Seema B Hegde, Adithya B, and Sathish Babu B, *Trust based notice passing protocol in academic campus: An opportunistic approach*, International Conference on Computing and Communication Networks (ICCCNT), Coimbatore, July 2012.
15. Brinda N and Sathish Babu B, *Application of Partitioned EDF Scheduling in Cloud Computing Scenario* , ICECIT 2013, Nov. 22-23, 2013, SIT, Tumkur.
16. Shruthi K and Sathish Babu B, *Context Aware Data Center Allocation in Cloud Computing Environment* , ICECIT 2013, Nov. 22-23, 2013, SIT, Tumkur.
17. Savithramma RM and Sathish Babu B, *Optimizing Pre-Copy Live Migration of VM using Dependency graph*, ICECIT 2013, Nov. 22-23, 2013, SIT, Tumkur.
18. Seema B Hegde and Sathish Babu B, *Limitations of resource pooling in MANET's* , ICECIT 2013, Nov. 22-23, 2013, SIT, Tumkur.
19. Jagadamba G and Sathish Babu B, *A Dynamic Context-Aware Access Control(CAAC) System*, ICECIT 2013, Nov. 22-23, 2013, SIT, Tumkur.
20. Sadanand R. Inamdar, Sathish babu B. and Ravi M. Yadahalli, *"Cross Layer Optimization Design Approach for Wireless Ad hoc Networks,"* in *Proc. of National Conference on Emerging Trends in Engineering & Management (NCETM)*, March 2013, PESITM, Shivamogga, Karnataka, India

21. Sadanand R. Inamdar, Sathish babu B. and Ravi M. Yadahalli, "CROSS LAYER DESIGN APPROACH IN MANETs," in *Proc. of International Conference on Emerging Innovative Technologies for Sustainable World (ICEITSW)*, October 2013, SIET, Tumakuru, Karnataka, India.
22. Seema B Hegde and Sathish Babu B, *An agent based watchdog system for Urban Garbage Management*, Indian technology Congress 2014, Bengaluru, 21-22, Aug. 2014.
23. Bhargavi K and Sathish Babu B, *Cloud Based Solution to Manage Demographic Demand and Supply of Skills*, Indian technology Congress 2014, Bengaluru, 21-22, Aug. 2014.
24. Seema B Hegde, SathishBabu B, *An analysis of routing and security protocols in Opportunistic Computing*, International Conference on Contemporary Computing and Informatics, Mysore, India, November, 2014
25. Rajeshwari U and B. Sathish Babu, *Real-time credit card fraud detection using Streaming Analytics*, ICATCCT 2016, Bangalore.
26. Sahana Raj and B. Sathish Babu, *Converting an E-commerce Prospect into a Customer using Streaming Analytics*, ICATCCT 2016, Bangalore.
27. Mohan N V, Meshram Shubham, Pranav Kumar, and B Sathish Babu, "Intelligent resource allocation and de-allocation (IRAD) scheme for cloud infrastructure services", International Conference DIGITS 2017, Computer Society of India, Visakhapatnam, 24-25 Feb. 2017.
28. K. Bhargavi, and B. Sathish Babu, "Soft-set based DDQ scheduler for Optimal Task Scheduling under Uncertainty in the Cloud", IEEE 2nd International Conference On Emerging Computation and Information Technologies (ICECIT), 2017.
29. K. Bhargavi, and B. Sathish Babu, "An Uncertainty-Aware Resource Provisioning in the Cloud using Type-2 Soft-Set based Inverse Reinforcement Learning", Indian Symposium on Computer Systems (IndoSys 2018), IIT-Hyderabad, 2018.
30. Lathashree, Niveditha, Pooja, k Bhargavi, Sathish Babu B, "Multiple CAs based framework to provide Remote Palliative Care for patients undergoing Chemotherapy", Second International Conference on Advances in Computing and Data Sciences (ICACDS-2018) , Scopus indexed, Springer CCIS, Dehradun, India, 2018.
31. Lathashree, Niveditha, Pooja, k Bhargavi, Sathish Babu B, "Multiple CAs based Framework with ANN for Load Balancing in Cloud Computing Environment", IEEE International Conference for Convergence in Technology (I2CT), Mangalore, India, 2018.
32. K. Bhargavi, and B. Sathish Babu, "Accelerating the Big Data Analytics by GPU based Machine Learning: A Survey", Chapter, DOI: 10.1007/978-3-319-75683-7_5, In book: Proceedings of International Symposium on Sensor Networks, Systems and Security, pp.63-83, 2018.
33. Jayashree and B. Sathish Babu, "ElGamal-based Privacy-Preserving Scheme (EPPS) for Edge-Cloud-of-Things (ECOT)", 4th IEEE International Conference on Computational Systems and

Information Technology for Sustainable Solutions [CSITSS-2019], 20th – 21nd December 2019, RVCE, Bangalore.

34. Bhargavi K and B. Sathish Babu, "*Load Balancing Scheme for the Public Cloud using Reinforcement Learning with Raven Roosting Optimization Policy (RROP)*", 4th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2019], 20th – 21nd December 2019, RVCE, Bangalore.
35. Aishwarya Seth, B. Sathish Babu and S S Iyengar, "*Machine Learning Model for Predicting Insomnia Levels in Indian College Students*", 4th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2019], 20th – 21nd December 2019, RVCE, Bangalore.
36. Jainil Viren Parikh, Abhiram Natarajan and B. Sathish Babu, "*Library Automation System: Book cover recognition using deep learning*", 4th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2019], 20th – 21nd December 2019, RVCE, Bangalore.
37. Vihaan Nama, Vinay Hegde and B. Sathish Babu, "*Sentiment Analysis of Movie Reviews: A Comparative Study between the Naïve-Bayes Classifier and a Rule-based Approach*", The 2nd International Conference On Innovative Trends In Information Technology (ICITIIT'21) ,11-12 February 2021, IIIT, Kottayam, Kerala
38. Nishchal J, Sanjana Reddy, Navya Priya N, Varsha R Jenni, Hebbar R, and Sathish Babu B, "*Pansharpening and Semantic Segmentation of Satellite Imagery*", IEEE Sponsored Asian Conference on Innovation in Technology (ASIANCON) 2021, Pune, Maharashtra, India, 28th Aug – 29th Aug. 2021.
39. Vihaan Nama and B Sathish Babu, "Sleep Analysis – An Innovative Concept of Using Technology to Analyse Dreams and Determine Behaviour", ISTE. Critical Thinking For GenZ-Multidisciplinary Approach (CTGZMA-2021), RVCE, Bangalore, India, 28th – 29th October 2021.
40. Rohit Sachin Sadavarte, Rishab Raj P, and B Sathish Babu, "Solving Lunar Lander Problem using Reinforcement Learning", IEEE CSITSS-2021, RVCE, Bangalore, India, 16th – 18th December 2021.
41. Vishal M, Yatin Satija, and B Sathish Babu, "Trading Agent for the Indian Stock Market scenario using Actor-Critic based Reinforcement Learning", IEEE CSITSS-2021, RVCE, Bangalore, India, 16th – 18th December 2021.
42. Risha Dassi, Sakshi Kamal, and B Sathish Babu, "E-waste Detection and Collection assistance system using YOLOv5", IEEE CSITSS-2021, RVCE, Bangalore, India, 16th – 18th December 2021.
43. Revathi S A, B Sathish Babu, and K N Subramanya, "Deep Learning Approach for Segmenting and Classifying Knee Osteoarthritis using MR Images", 3rd International Conference on Artificial Intelligence: Advances and Applications (ICAIAA 2022), Poornima College of Engineering, Jaipur, India, 23rd – 24th April 2022.

44. Dr. B. Sathish Babu, Sannidhi Shetty, Pranamya Mady, Vaishnavi K Bhustali, Anushka Agarwal, Sai Lahari Sreerama, Sanka Sanjana, "Temple Inscriptions Recognition and Transliteration in Devanagari Script", IEEE 2nd International Conference on Vision Towards Emerging Trends in Communication and Networking Technologies, VIT-Vellore, 05th - 06th, May 2023.
45. Jayashree N, B Sathish Babu, and Subramanya K N, "A Collective Intelligence Framework for Energy Optimization in Industry 4.0 Enabled Manufacturing", 56th Annual Convention of Operational Research Society of India (2023-ORSI) and 10th International Conference on Business Analytics and Intelligence (2023-ICBAI), 18-20, December 2023, IISc. Bangalore
46. P. Bhanumathi, Bhoomika, and Sathish Babu B, "Data Science and Machine Learning Approach for the Leadership Style Prediction," the 16th ISDSI-Global Conference 2023 at IIM Ranchi on December 28th, 2023.

LIST OF JOURNAL PUBLICATIONS:

1. B. Sathish Babu, and P. Venkataram, *Cognitive Agents based Authentication & Privacy Scheme for Mobile Transactions (CABAPS)*, **Computer Communications - Elsevier, Vol. 31, Issue 17, PP. 4060-4071, 2008. (Scopus and Web of Science, IF: 2.816) [Q1].**
2. B. Sathish Babu, and P. Venkataram, *Performance Analysis of an Authentication Scheme for Personalized Mobile Multimedia applications: A Cognitive Agents based Approach*, **International Journal of Security and Its Applications(IJSIA), Vol. 2, No. 4, 2008. (Scopus index).**
3. P. Venkataram, Jeremy Pitt, B. Sathish Babu, and E. Mamdani, *An Intelligent Proactive Security System for Cyber Center using Cognitive Agents*, **International Journal of Information and Computer Security (IJICS), Vol. 2, No. 3, PP. 235 - 249, 2008. (Scopus) [Q3].**
4. B. Sathish Babu, and P. Venkataram, *Random security scheme selection for mobile transactions*, **Journal of Security and Communication Networks, DOI: 10.1002/sec.113, Vol. 2, No. 3, 2009. (IF : 0.806) (Scopus, IF=1.376) [Q1].**
5. B. Sathish Babu, and P. Venkataram, *A Dynamic Authentication Scheme for Mobile Transactions*, **International Journal of Network Security (IJNS), Vol. 8, No. 1, PP. 59-74, 2009. (Scopus indexed)**
6. Keerthi M, B Satish Babu, Ankit Agrawal and Ritu Sama, *Application Processor Queue Prioritization*, **International Journal on Advanced Computer Theory and Engineering, ISSN (Print) : 2319 – 2526, Volume-1, Issue-1, 2012.**
7. B.Adithya and B. Sathish Babu, *Capacity and Service (CapServ) Adaptive Trust Computation by Territory Formation in Ubiquitous Environment*, **International Journal of Advanced Pervasive and Ubiquitous Computing, 4(4), 7-18, October-December 2012.**
8. Sadanand. R.Inamdar, Ravi.M.Yadahalli and Sathish babu B, *Smart antenna system using cross layer design in wireless ad hoc networks: trends and challenges*, **World Journal of Science and Technology, 2(5):74-79, 2012**

9. B Sathish Babu, Jayashree N, Pallapa Venkataram, *Performance Analysis of Steiner Tree-based Decentralization Mechanism (STDM) for Privacy Protection in Wireless Sensor Networks*, **International Journal of Network Security**, 2013. (Scopus indexed)

10. B. Sathish Babu, K. Bhargavi , and Pallapa Venkataram, *CAs-based QoS Scheme for Remote Health Monitoring*, **International Journal of Agent Technologies and Systems (IJATS)**, Vol. 5, No. 4, PP. 44-66, Oct-Dec. 2013.

11. Sathish Babu B, Brinda, and Pallapa Venkataram, *EDF Scheduling Technique for Private Cloud Environment using Hadoop MapReduce*, **International Journal of Cloud Computing and Services Science (IJ-CLOSER)**, Vol 3, No. 4, 2014. (Scopus indexed).

12. B. Sathish Babu and Jagadamba G, "Security in Cyber-Physical Systems: A Generalized Framework based on Trust with Privacy", in "Cyber Physical Systems – A Computational Perspective", **Publisher: CRC Press, Taylor & Francis Group**, 2015

13. B. Sathish Babu and Bhargavi K, "GPU Computation and Platforms", in "Emerging Research Surrounding Power Consumption and Performance Issues in Utility Computing", **Publisher: IGI Global Publications**, 2015

14. Sadanand R. Inamdar, Sathish Babu B. and Ravi M. Yadahalli, "Key Enabling Technologies for Future MANET Applications," **International Journal of Advanced Research Electrical Electronics and Instrumentation Engineering**, Vol. 5, Issue 11, pp. 8392-8401, Nov. 2016. [ISSN: 2278-8875]. Available online: www.ijareeie.com (scientific World Index).

15. Sadanand R. Inamdar, Sathish Babu B. and Ravi M. Yadahalli, "Cross Layer Design Approach for Future MANET Applications," **International Journal of Computer Science and Mobile Computing**, Vol. 5, Issue 11, pp. 96-103, Nov. 2016. [ISSN: 2320-088X]. Available online: www.ijcsmc.com.

16. Jagadamba G and B. Sathish Babu, *Adaptive Context-aware access control mechanism for ubiquitous learning environment*, **BIJIT-BVICAM's International Journal of Information Technology**, January - June, 2016; Vol. 8 No. 1; ISSN 0973 –5658.

17. B. Sathish Babu and Savithramma R.M, *Optimized Pre-Copy Live VM Migration by Instruction Dependency Identification*, **Inderscience International Journal of Cloud Computing**, Vol 5, No. 4, 2016. (Scopus indexed) [Q4]

18. Jagadamba. G and B. Sathish Babu, "Context and Trust Based Adaptive Security for Accessing Services in Ubiquitous Environment", **International Journal of Systems and Service-Oriented Engineering, IGI Global**, Volume- 6, Issue-4, pages-1-24, December- 2016.

19. Jagadamba. G and B. Sathish Babu, "Context and Trust based adaptive security policy: A Survey", **International Journal of Computer Systems (ISSN:2394-1065)**, Volume- 03, Issue-02, February 2016.

20. Jagadamba. G and B. Sathish Babu, "Adaptive Security Schemes based on Context and Trust for Ubiquitous Computing Environment: A Comprehensive Survey ", **Indian Journal of Science and Technology (Scopus indexed)**, Volume- 9, Issue-48, 2016.

21. Sadanand R. Inamdar, Sathish Babu B. and Ravi M. Yadahalli, "A Review of MAC Solutions in Directional Communication Enabled MANETs," **Journal of Basic and Applied Research International**. Vol. 20, No. 4, pp. 202-219, March 2017. Available online: www.ikpress.org
22. Seema B Hegde, Sathish Babu B, Pallapa Venkataram, " A Cognitive Theory based Opportunistic Resource Pooling Scheme for Ad hoc Networks", **Journal of Intelligent System, (Scopus indexed)**, Volume 26, Issue 1, PP. 47-68, 2017 [Q4]
23. Sadanand R. Inamdar, Sathish Babu B. and Ravi M. Yadahalli, "RADMMAC: Cognitive MAC protocol using routing traffic knowledge for MANETs," **Journal of Basic and Applied Research International**. Vol. 21, No. 4, pp. 163-179, April 2017. Available online: www.ikpress.org.
24. Seema B Hegde, Sathish Babu B, "An Opportunistic AODV Routing Scheme: A Cognitive Mobile Agents Approach", **International Journal for Ad Hoc, Sensor and Ubiquitous Computing (IJASUC)**, Volume 8, Issue 1/2/3, June 2017
25. Sadanand R. Inamdar, Sathish Babu B. and Ravi M. Yadahalli, Paradigm Shift in Routing Approaches for High Speed MANET Applications, **EJERS, European Journal of Engineering Research and Science** Vol. 2, No. 1, January 2017, (IF: 0.65)
26. Sadanand R. Inamdar, Sathish Babu B. and Ravi M. Yadahalli, "Ant Based Adaptive Directional Monitoring MAC Protocol Using Smart Antennas in MANET," **International Journal of Business Data Communications and Networking (IJBDCN) –IGI Global publications, (Scopus indexed)** Vol. 14, No. 1, pp. 46-66, 2018. [Q4]
27. Seema B Hegde, Sathish Babu B, Pallapa Venkataram, "A Dynamic Security Scheme for Opportunistic Networks using Cognitive Computing", **International Journal of Mobile Computing and Multimedia Communications (IJMCMC), (Scopus indexed)**, Vol. 9, Issue 3, 2018. [Q3]
28. Bhargavi K, Sathish Babu B, and S. S. Iyengar, "Predicting the Brand Popularity from the Brand Metadata", **International Journal of Electrical and Computer Engineering (IJECE), (Scopus indexed)**, Vol. 8, No. 5, 2018. [Q2]
29. Jagadamba G. and B. Sathish Babu, A Service Oriented Adaptive Trust Evaluation Model for Ubiquitous Computing Environment, **International Journal of Ad Hoc and Ubiquitous Computing (IAHUC), Inderscience publications (Scopus indexed)**, Vol. 29, No. 4, 2018. [Q4]
30. Sadanand Ramchandrarao Inamdar, SathishBabu Basavaiah, and Ravi Malleshappa Yadahalli, "Co-Operative Directional Routing Protocol for MANET", **International Journal of Intelligent Engineering and Systems**, Vol. 11, Issue 2, 2018. (Scopus indexed) [Q3]
31. Jagadamba G. and B. Sathish Babu, "Keystroke Dynamics in E-Learning and Online Exams", **Biometric Authentication in Online Learning Environments, IGI Global, 2019**
32. K. Bhargavi, and B. Sathish Babu, "Uncertainty aware Resource Provisioning Framework for Cloud using Expected 3-Sarsa Learning Agent: NSS and FNSS based Approach", **Cybernetics and Information Technologies (Scopus and Web of Science indexed)** Vol. 19, Issue 3, Sept. 2019. [Q2]

33. Jyothi M Hurakadli and B Sathish Babu, "Virtual Machine Migration Techniques in a Cloud Computing Environment: A Survey", **Grenze International Journal of Engineering and Technology**, Jul 2019
34. K. Bhargavi, and B. Sathish Babu, "Soft-set based Double-Deep-Q Scheduler for Optimal Task Scheduling under Long-term Uncertainty in the Cloud", **International Journal of Engineering Sciences and Management - A Multidisciplinary Publication of VTU**, Vol: 1, No: 2, pp : 43-55, 2019.
35. Jyoti Shetty, B Sathish Babu, and G Shobha, "Proactive cloud service assurance framework for fault remediation in cloud environment", **International Journal of Electrical & Computer Engineering (Scopus indexed)**, Vol. 10, 2020. [Q2]
36. B. Sathish Babu, Bhargavi K, and K.N. Subramanya, "Optimal Parameter Prediction for Secure Quantum Key Distribution using Quantum Machine Learning Models", **Quantum Cryptography and the Future of Cyber Security**, IGI Global Publications, 2020.
37. B. Sathish Babu and N. Jayashree, "Edge intelligence models for Industrial IoT(IIoT)", **RV Journal of Science Technology Engineering Arts and Management**, Vol. 1, Issue 1, Jan 2020.
38. B. Sathish Babu and Brinda, "Opportunities for IoT in building smarter e-governance System", **RV Journal of Science Technology Engineering Arts and Management**, Vol. 1, Issue 1, Jan 2020.
39. Abhiram Natarajan and B Sathish Babu, " Minimizing downtime during software updates using micro services" , **International journal of advanced science and technology (Scopus indexed)**, Vol. 29, Issue 10, 2020.
40. Aishwarya Seth and B Sathish Babu, "The application of focal loss in various domains: A survey", **International journal of Research in Applied Science and Engineering Technology**, Vol. 8, Issue 4, 2020
41. K. Bhargavi, B. Sathish Babu, and Jeremy Pitt, "Performance modeling of load balancing techniques in the cloud: Some of the recent competitive swarm artificial intelligence-based", **Journal of Intelligent Systems (Scopus and Web of Science indexed)** Vol. 30, Issue 1, 2020. [Q4]
42. K. Bhargavi and B. Sathish Babu, "Load Balancing, Task Scheduling, and Resource Provisioning Schemes for Cloud Computing Environment: A Survey", **Journal of Seybold report**, Issue 8, 2020, 2291-2306 (Scopus indexed)
43. Shivani Pansare and B. Sathish Babu, "Automation of Failure Modes and Effects Analysis using fault Tree Analysis", **International Research Journal of Engineering and Technology (IRJET)**, Vol. 07 Issue 05, pp. 2845-2847, May 2020

44. Aishwarya Seth, Abeer Vaishnav, Sathish Babu B. and Subramanya K.N., "Quantum Computational Techniques for Prediction of Cognitive State of Human Mind from EEG Signals", **Journal of Quantum Computing**, Vol.2, No.4, pp. 157-170, 2020, DOI:10.32604/jqc.2020.015018
45. Bhargavi K, B. Sathish Babu and Subramanya K N, "Whale Optimization-based Double Reinforcement Learning Approach (WODRL) for Load Balancing in Fog Computing", **RV Journal of Science Technology Engineering Arts and Management**, Vol. 2, Issue 1, Jan. 2021.
46. Natarajan, A., Babu, B.S. & Gao, XZ. "Signature warping and greedy approach based offline signature verification", **International Journal of Information Technology[Scopus Q2]**, Vol. 13, 1279–1290, May 2021.
47. Aslam B Nandyal, Mohammed Rafi, M Siddappa and B. Sathish Babu, "Improving Data Services of Mobile Cloud Storage with Support for Large Data Objects using OpenStack Swift" , **International Journal of Advanced Computer Science and Applications(IJACSA)**, 12(6), 2021. <http://dx.doi.org/10.14569/IJACSA.2021.01206101> (Web of Science) [Q3]
48. Anirudh Kannan and B Sathish Babu, "Dual-Phase Framework for Cross-Domain Content Retrieval", **RV Journal of Science Technology Engineering Arts and Management**, Vol. 2, Issue 2, August 2021.
49. N. Jayashree, B. Sathish Babu and Basavraj Talwar, "Decentralized Priority-based Shortest Job First (DPSJF) Queue Model for IoT Gateways in Fog Computing", **International Journal of Grid and Utility Computing (IJGUC)**, Vol. 13, No. 4, 2022 [Scopus-Q3][Web of Science]
50. N. Jayashree and B. Sathish Babu, "Edge data analytics technologies and tools", **Advances in Computers**, Vol. 127, 2022, Pages 209-236, **Scopus [Q1]**
51. Naseer, M Rafi, M Siddapa, and B. Sathish Babu, "Fusion based Gait Recognition System using Ensemble Deep Learning for Biometric Security in Video Surveillance System", **Telematique** , Vol. 21, No. 1, 2022.
52. Bhargavi K, B Sathish Babu and Sajjan G Shiva, "Type-2-Soft-Set Based Uncertainty Aware Task Offloading Framework for Fog Computing Using Apprenticeship Learning", **Cybernetics and Information Technologies**, Vol.23, Issue 1, PP. 38-58, March 2023, **Scopus[Q2] and Web of Science**
53. P. Bhanumathi, Jeevitha. R, and B. Sathish Babu, "Identifying Unconscious Human Bias in Employee Retention Using Artificial Intelligence: IT Sector", **European Economic Letters(EEL)**, Vol. 13, No. 3, PP. 810-818, 2023 (**ABDC index**)
54. Revathi S A and Sathish Babu B, "Enhanced Image Classification with Integrating DenseNet121 with Mixup Augmentation and Attention Mechanisms for Knee OA", **IAES International Journal of Artificial Intelligence** (under review)

BOOK CHAPTERS:

1. Jagadmba G and Sathish Babu B, "Security in Cyber-Physical Systems: A Generalized Framework based on Trust with Privacy", "Cyber Physical Systems –A Computational Perspective" , CRC Press, Taylor & Francis Group, 2015
2. K. Bhargavi, and B. Sathish Babu, "GPU Computation and Platforms", in Emerging Research Surrounding Power Consumption and Performance Issues in Utility Computing, IGI Global Publications, 2016
3. K. Bhargavi, and B. Sathish Babu , " Accelerating the Big Data Analytics by GPU based Machine Learning: A Survey ", in International Symposium on Sensor Networks, Systems and Security, Springer Verlag, Florida, USA, 2018
4. Jagadamba G and Sathish Babu B, "Keystroke Dynamics in E-Learning and Online Exams", in Biometric Authentication in Online Learning Environments, IGI Global Publications, 2019.
5. B. Sathish Babu, Bhargavi K, and K.N. Subramanya, "Optimal Parameter Prediction for Secure Quantum Key Distribution using Quantum Machine Learning Models", in Quantum Cryptography and the Future of Cyber Security, IGI Global publications, IGI Global publications, 2020.
6. K. Bhargavi and B. Sathish Babu, "Application of Convolutional Neural Network and its Architectures for Fungal Plant Disease Detection", in Artificial Intelligence and IoT-Based Technologies for Sustainable Farming and Smart Agriculture, IGI Global Publications, 2020
7. K. Bhargavi and B. Sathish Babu, "Neutrosophic Set Theory and Engineering Applications: A Study", in Decision-Making with Neutrosophic Set: Theory and Applications in Knowledge Management, Nova Science Publications, 2021
8. P. Bhanumathi and Sathish Babu B, "Transforming talent acquisition in Artificial Intelligence way", The HR Phoenix, Human Resource Practices in the Shifting Paradigms, Compendium published by NHRDN Kolkata Chapter, ISBN 978-81-19524-59-4, Feb. 2024.
9. P. Bhanumathi, Jeevitha R., and Sathish Babu B, "Generic Framework for AI-Based E-Learning for Employee Training and Quality Learning Experience," in Artificial Intelligence and Machine Learning for Business, AAP Advances in Artificial Intelligence and Robotics, CRC Press, (Accepted and publication in July 2024)
10. P. Bhanumathi , Keerthi , and Sathish Babu B, "Employee Wellbeing and Mental Health: Critical Role in Retention Strategies", Global Practices on Effective Talent Acquisition and Retention, DOI: 10.4018/979-8-3693-1938-3, ISBN13: 9798369319383|EISBN13: 9798369319390 (Accepted and publication in June 2024)
11. P. Bhanumathi , Anjali , and Sathish Babu B. "Employee Retention Strategies Through Predictive Data Analytics and AI", Global Practices on Effective Talent Acquisition and Retention, DOI:10.4018/979-8-3693-1938-3, ISBN13:9798369319383|EISBN13: 9798369319390(Accepted and publication in June 2024)
12. P. Bhanumathi, Shayanti Basu, and Sathish Babu B, "Artificial Intelligence and Machine Learning Powered Recruitment for Smart Hiring", Global Practices on Effective Talent Acquisition and Retention, DOI: 10.4018/979-8-3693-1938-3, ISBN13:9798369319383|EISBN13: 9798369319390 (Accepted and publication in June 2024)

Publication Stats. (As on 01-05-2024) ORCID ID: <https://orcid.org/0000-0003-1407-5698>

Index	No. of Articles	No. of Citations	h_index
Google Scholar	94	423	10
Scopus	44	158	7
Web of Science	21	87	3
Research Gate	51	148	5

CENTRE OF EXCELLENCE IN AI RESEARCH AND BUSINESS SOLUTIONS

- Established the CoE in the department of AI & ML along with BOSTON Training Academy, which is a subsidiary of BOSTON Ltd. UK.
- Obtained the hardware worth Rs. 50 Lakhs for the CoE
- Started the six-month certification course in Data Science, and successfully conducted three batches.
- Conducted internships for 150+ engineering students

CENTRE OF EXCELLENCE IN QUANTUM COMPUTING (CIRQuIT)

- Faculty Mentor - since 2019
- Obtained the funding from CySecK to conduct research in the domain of Quantum Cryptography - 2.6 Lakhs
- Obtained funding from AICTE to conduct FDPs in the domain of Quantum Computing (2021 & 2023)
- Conducting student internship and mentorship programs
- Worked with IBM on Quantum Experience

BOOKS PUBLISHED:

- **Title: Mobile and Wireless Network Security**

Publisher: Tata McGraw hill

Authors: Prof. Pallapa Venkataram (IISc) and Prof. B. Sathish Babu (SIT)

Year: 2010

- **Title: Communication Protocol Engineering**

Publisher: PHI India

Authors: Prof. Pallapa Venkataram (IISc), Sunil Kumar Manvi(RITM) and Prof. B. Sathish Babu (SIT)

Year: 2014

OTHER ACTIVITIES AND NETWORKING:

1. Member, Professional Advisory Committee, Karnataka Municipal Data Society, Directorate of Municipal Administration, IT Park, Rajajinagar, Bangalore
2. Member, Pilot project for the Implementation of AI Driven Integrated Traffic Management and eChallan system, Bangalore City Traffic, Govt. of Karnataka
3. Member BOS, Dept. of AI&DS, RIT, Bangalore
4. Member BOS, Dept. Of CSE, GIT, Belguam (VTU Nominee)
5. Member BOS, Dept. of CSE, NMIT, Bangalore
6. Member BOS, Dept. of AI & ML, BMSCE, Bangalore
7. Member BOE and BOS, Dept. Of CSE, NMIT, Bangalore

8. Member, Research Examination, Reva University, Bangalore
9. Chaiman, BOS and BOE, Dept. of AIML, RVCE
10. Editorial Member of RVCE Journal and VTU Interdisciplinary journal
11. Mentor, Samsung PRISM Consultancy project.
12. Jury member of Smart India Hackathon, 2020.
13. Former Member BOS, Dept. of CSE, Reva University
14. Former Member BOE, Dept. of AI & ML, MSRIT
15. Former Member BoE (CSE/ISE) 2021-2022, VTU, Belagavi
16. Former Member BOS, Dept. of ISE, MSRIT
17. Former Member BOS, Dept. Of ISE, NMIT, Bangalore (VTU Nominee)
18. Former Member Advisory body, Dept. of ISE, Acharya Institute of Technology, Bangalore
19. Former Member BOE, SIT, Tumkur
20. Former Member BOS, CMRIMS, Bangalore
21. Former Member BOE, UVCE, Bangalore

MEMBER OF DOCTORAL COMMITTEE AND PH.D. EXAMINER/SUBJECT EXPERT:

1. Visveswaraya Technological University, Karnataka
2. PES University, Karnataka
3. Reva University, Karnataka
4. University of Mysore, Karnataka
5. Anna University, Tamilnadu
6. Bharatiyar University, Tamilnadu
7. Amrutha University, Karnataka
8. Sathyabhama University, Tamilnadu
9. Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya University (SCSVMV), Tamilnadu

PROGRAM CHAIR:

- International Conference on Emerging Computation and Information Technologies(ICECIT-2013), organized by Dept. of CSE and Dept. of ISE, Siddaganga Institute of Technology, Tumkur, Nov. 22-23, 2013.
- 4th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2019], R V College of Engineering, Bangalore, 20th and 21st December 2020.
- 5th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2021], R V College of Engineering, Bangalore, 16th - 18th December 2021.
- 6th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2022], R V College of Engineering, Bangalore, 21st to 23rd December 2022.
- International Conference on Artificial Intelligence and Machine learning in Applied BioTechnology - 2022, 8th-10th, Dec. 2022

MEMBER OF TECHNICAL/ADVISORY COMMITTEE /SESSION CHAIR:

- | | |
|---|--|
| 1. ARTCOM 2012 | 7. I4C 2014, MSRIT, Bangalore o IPAC 2015, Algeria |
| 2. NCACA 2012 | 8. IEEE IACC-2016, Bhimavaram, AP, India |
| 3. National Conference on Soft Computing, CMRIMS, Bangalore | 9. ICEECE-2017, Tamilnadu |
| 4. ICCVSP 2013 | 10. SmartTechCon-2017, Reva University, Bangalore |
| 5. ICAECC 2014 o ERCICA 2014 | 11. CSITSS – 2017, RVCE, Bangalore |
| 6. PRIMA 2014, Australia | |

12. ICACCI-2018, PES Institute of Technology, Bangalore
13. ICAECC – 2018, Reva University, Bangalore
14. CSITSS– 2019, 20th-21st, Dec. 2019, RVCE, Bangalore
15. IACIT-2020, 29th-30th April, 2020, Reva University, Bangalore
16. ERCICA-2020, NMIT, Bangalore
17. IACIT-2021, Reva University, Bangalore
18. CSITSS-2021, RVCE, Bangalore
19. CSITSS-2022, RVCE, Bangalore
20. AIMLBIO-2022, RVCE, Bangalore
21. 2nd International Conference on Data, Decision and Systems - 2023
22. IEEE CONECCT 2023
23. CSITSS - 2023
24. ICDDS - 2023

REVIEWER:

- InderScience - International Journal of Information and Computer Security(IJICS)
- InderScience - International Journal of Security and Networks (IJSN)
- InderScience – International Journal of Cloud Computing (IJSN)
- International Journal of Distributed Sensor Networks
- International journal of Computer Systems Science and Engineering
- International Journal of Cybernetics and Systems
- CMC-Materials, Materilas & Continua

INDUSTRY WORKSHOPS/TALKS ORGANIZED:

- One Day Hands-On Workshop on IBM Bluemix Cloud and Watson Cognitive Computing, for V Sem. ANN Elective students, on 13/10/2017
- Faculty coordinator for FIU International Summit organized by partnering institutions and FIU-Florida on 30/08/2018.
- One Day Hands-On Workshop on Convolutional Neural Networks by IBM India, for V Sem. ANN Elective students, on 14/09/2018
- One Day Hands-On Workshop on Microsoft Cognitive Services by Microsoft India, for V Sem. ANN Elective students, on 12/10/2018
- IBM cloud technologies and Watson Computing .Speakers: Malarvizhi Kandasamy and Saurav Raiguru, IBM India Ltd, on 24/02/2020
- RVCE-Industry Internship coordinator, AI/ML and Quantum Computing, 5/8/2020 – 4/9/2020.
- Expert talk on "Probabilistic reasoning and Bayesian Networks" by Dr. Prasad Sudhakara Murthy, Staff Scientist, Advanced Technology Group, GE Healthcare, 23/7/2021.
- RVCE-Industry Internship coordinator, Quantum Computing, 1/9/2021 – 31/10/2021
- Two Days Workshop on Fundamentals of Deep Learning Models with Accelerated Computing 9th-10th Mar. 2023
- Intel OneAPI and IPU Workshop 31st March 2023

NATIONAL LEVEL WORKSHOPS/FDPs ORGANIZED:

- Quantum Computing Fundamentals and Applications, March 1st – 5th, 2021, R V College of Engineering, in association with IEEE Computer Society and IBM India Ltd.
- FDP Chief Co-ordinator, AICTE-ATAL FDP on “Quantum Computing Algorithms and Machine learning”, 02/08/2021 – 06/08/2021.
- FDP Chief Co-ordinator, AICTE-ATAL FDP on “Quantum Photonics, Computing and Communications”, 18/12/2023 – 23/12/2023.

JOINT RESEARCH WORKS WITH INTERNATIONAL UNIVERSITIES:

Dr. Jeremy Pitt, Imperial College, London	P. Venkataram, Jeremy Pitt, B. Sathish Babu, and E. Mamdani, <i>An Intelligent Proactive Security System for Cyber Center using Cognitive Agents</i> , International
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	Journal of Information and Computer Security (IJICS), Vol. 2, No. 3, PP. 235 - 249, 2008. (Scopus) [Q3]. K. Bhargavi, B. Sathish Babu, and Jeremy Pitt, "Performance modeling of load balancing techniques in the cloud: Some of the recent competitive swarm artificial intelligence-based", Journal of Intelligent Systems (Scopus and Web of Science indexed) Vol. 30, Issue 1, 2020. [Q3]
Dr. S.S. Iyengar, Florida International University, Miami, USA	Aishwarya Seth, B. Sathish Babu and S S Iyengar, "<i>Machine Learning Model for Predicting Insomnia Levels in Indian College Students</i>", 4th IEEE International Conference on Computational Systems and Information Technology for Sustainable Solutions [CSITSS-2019], 20th – 21nd December 2019, RVCE, Bangalore. Bhargavi K, Sathish Babu B, and S. S. Iyengar, "Predicting the Brand Popularity from the Brand Metadata", International Journal of Electrical and Computer Engineering (IJECE), (Scopus indexed), Vol. 8, No. 5, 2018. [Q2]
Dr. Xiao-Zhi Gao, School of Computing, University of Eastern Finland, Kuopio, Finland	Abhiram Natarajan, B. Sathish Babu and Xiao-Zhi Gao, "Signature Warping and Greedy Approach Based Offline Signature Verification", International Journal of Information Technology[Scopus Q2], Vol. 13, 1279–1290, May 2021.
Dr. Sajjan G Shiva University of Memphis, USA	Bhargavi K, B Sathish Babu and Sajjan G Shiva, "Type-2-Soft-Set Based Uncertainty Aware Task Offloading Framework for Fog Computing Using Apprenticeship Learning", Cybernetics and Information Technologies, Vol.23, Issue 1, PP. 38-58, March 2023, Scopus[Q2] and Web of Science

RESEARCH/CONSULTANCY PROJECTS (Past 3 Years):

Name of the industry	Area	Amount	Duration	Status
Surya Software Systems Pvt. Ltd.	Distributed File Systems and Distributed SQL Queries for CF files	1,08,000/-	Nov-2020 to Feb-2021	Completed

Covenant Brussels, BELGIUM	Covenant online dispute resolution system MVP	90,000/-	Apr-2021 to June-2021	Completed
ATAL FDP	Quantum Computing Algorithms and ML	93,000/-	02/08/2021 to 06/08/2021	Completed
Toyota Industries Engine India Pvt. Ltd.	To Identify the root cause for Co-axiality NG & roughness NG in Head Machining Line (Machine Operation No. 490)	1,56,000/-	Nov-2021 to Apr-2022	Completed
CySecK Research Development Programme – Govt. of Karnataka	Quantum Key Distribution Scheme For Securing Smart Grid Communications	2,60,000/-	Sept-2022 to Sept-2023	Completed
Bullwork Mobility	Deep learning models for plant health monitoring	3,54,000/-	Oct-2022 to June 2024	Ongoing
ATAL FDP	Quantum Photonics, Computing and Communications	3,50,000/-	Dec 18 th to Dec 23 rd , 2023	Completed

RESEARCH PROJECTS COMPLETED:

Year Of Funding	Sponsoring Organisation	Title Of Project	Amount of Grant	Role
2004	DIT, Govt. of India	Design and Development of a Security Scheme for M-Commerce applications.	27 Lakhs	Researcher at IISc
2007	DIT, Govt. of India	Design and Development of Ubiquitous Computing (UC)-Test Bed and UC Application.	97Lakhs	Researcher at IISc
2008	UKIERI (United Kingdom-India Education Research Initiative)	Adaptive Network Security for MANET's	75000 GBP	Co-Investigator
2012	ABB-Bangalore	Generic Key Management Infrastructure for Industrial automation Systems	7.0 Lakhs	Principal Investigator
2012	VTU-Belgaum	Trust-based security system for Ubiquitous Networks	5.39 Lakhs	Principal Investigator
2013	ABB-Bangalore	Creating SCA infrastructure Framework	15 Lakhs	Principal Investigator

INVITED TALKS GIVEN IN VARIOUS NATIONAL AND STATE LEVEL WORKSHOPS / CONFERENCES:

2005:

- 1.** Indo-UK Workshop on Ubiquitous Computing, November 16-17,2005, **Indian Institute of Science**, Bangalore, India.

2007:

- 2.** National Conference on Cyber Security, March 8 - 10, 2007, Bangalore, India.

2008:

3. QIP short-term course on Ubiquitous Computing at Indian Institute of Science, Bangalore. January 7-11, 2008
4. Faculty development program on Computer Network Simulation (CNS 2008).at Basaveshwar Engineering College, Bagalkot. February 21 - 23, 2008
5. Workshop on Wireless Networks at Sri Siddartha Institute of Technology, Tumkur. October 24, 2008
6. Staff Development Programme on Web Security at R.V.R & J.C College of Engineering, Guntur. 17th to 29th December, 2008

2009:

7. QIP short term course on Wireless Security, at Indian Institute of Science, Bangalore. March 9-13, 2009.
8. Staff Orientation Programme on Recent Pedagogical Approaches in Engineering Education at KIIT University, Bhubaneswar, Orissa. 24th July 2009.
9. AICTE Workshop on Wireless Security at SSN College of Engineering, Kalavakkam, Chennai. 31st July 2009.
10. CSIR Sponsored Workshop on Research Directions in Virtualization at VLB Janakiammal college of Engineering and Technology, Coimbatore. 20th Nov. 2009.

2010:

11. AICTE Sponsored FDP on IPv6 Migration and Co-existence at SKCET, Coimbatore. 26th and 27th May 2010.
12. FDP on How to a setup a private cloud for IaaS Applications at SKCET, Coimbatore. 27th and 28th Nov. 2010.
13. QIP short-term course on Wireless Security at Indian Institute of Science, Bangalore. December 20th-24th, 2010.

2011:

14. Faculty development Program on Advanced Computer Networks and Simulators at Reva Institute of Technology, Bangalore. January 27th-29th, 2011.
15. Workshop on Mobile Computing and Security at SIET, Tumkur. February 4th-5th, 2011.
16. Workshop on Optical Networks, issues and challenges at Dr. AIT, Bangalore. February 14th-15th, 2011.

17. Workshop on Engineering Pedagogy at Indian Institute of Science, Bangalore. March 25th -26th, 2011,
18. Workshop on Advances in Computer Applications at SSIT, Tumkur. 31st March 2011.
19. Workshop on Java Programming at SIET, Tumkur. July 2nd 2011.
20. Lecture Series on cloud computing KSCST Sir. M. Visvesvaraya Frontier, GAT, Bangalore. Nov 3rd 2011.
21. Invited talk on Cloud computing and emerging applications, KIT, Tiptur.

2012:

22. Invited talk on Adhoc Networks Simulation, ISTE sponsored workshop on Mobile adhoc.
23. Networks and Simulation at SSPMs college of Engg, Kankaveli, MH. 10th Jan. 2012.
24. Invited talk on Opportunistic Computing, A state level workshop on Contemporary Wireless Network System at SIET, Tumkur. 11-Feb-2012.
25. Invited talk on Human Computer Interaction, National Conference on Soft Computing at CMRIMS.
26. Invited talk on Seamless Mobility and Ubiquitous Multimedia, VTU-VGST FDP Programme on Network Technologies to Emerging Broadband Multimedia Computing, NIE, Mysore. 27th Feb. 2012.
27. Invited talk on Cognitive Agents Research and Applications, AICTE Sponsored Faculty
28. Development Program(FDP) on 'Agent Based Systems and Applications' between 15th - 17th March 2012, MSRIT, Bangalore
29. Talk on Context-aware Computing, ABB-Sponsored Technical Day Celebrations at SIT, Tumkur, 21-03-2012.
30. Invited talk on Cognitive agents research, NCACA-2012, SSIT, 11-May-2012.
31. Invited talk on Information Retrieval Challenges, Two days workshop on Information retrieval and
32. Key note address on Web Programming trends and opportunities, National level seminar on PHP, HKBK College of Engg., Bangalore, 14-09-2012.

2013:

33. TEQIP II Sponsored Faculty Development Programme on Research issues in Distributed Sensor Networks, Shri B. V. V. Sangha's Basaveshwar Engineering College (Autonomous), Bagalkot, August 3rd, 2013.
34. TEQIP II sponsored workshop on Emerging trends in Mobile computing - From Mobile Application to Context Aware Computing, MSRIT, Bangalore, September 26th, 2013.
35. AICTE Sponsored QIP Short term course on Engineering Pedagogy and Curriculum Development, Dept. of continuing education, Indian Institute of Science, Bangalore, October 22nd, 2013.
36. TEQIP II Sponsored Faculty Development Programme on Mobile Computing and Security issues, Sree Vidyanikethan Engineering College, Sree Sainath Nagar, Turupati 517 102, November 08th, 2013.

2014:

37. A Training program on Incorporation of Pedagogy in Engineering Education, Dept. of Continuing education, Indian Institute of Science, Bangalore, 3rd-7th February, 2014.
38. TEQIP II Sponsored 3-day workshop on Web 2.0 and RIA at Siddaganga Institute of Technology, Tumkur. February 20-22, 2014.
39. TEQIP II Sponsored 3-day workshop on Protocol Engineering, at Siddaganga Institute of Technology, Tumkur. March 10-12, 2014.
40. Three Day National Level Workshop on CLOUD COMPUTING IN ACADEMICS AND RESEARCH (CAR-14) on 4th-6th, Apr., 2014, JNTU, Pulivendala, AP.
41. Two day National Seminar on Research and Development in Computer Science and its Applications, 10th and 11th, Apr., 2014, SSIT, Tumkur.
42. Five-day workshop on Big data analytics and Hadoop, 28th July to 01st Aug. 2014, REVA ITM, Bangalore.
43. A key note address on Cloud Computing and Trends, JNNCE-Shimoga, 29th Sept. 2014.
44. Invited talk on Cloud Computing Security and Data Analytics, One Week UGC sponsored workshop on Research Issues and Challenges in IoT on Cloud computing, 06/10/2014 to 10/10/2014, Coimbatore Institute of Technology, Coimbatore.

2015:

45. AICTE Sponsored Two Week FDP on “Emerging Challenges and research Perspectives in Network security and Intrusion Detection systems”, May 04-16, 2015, Sree Vidyanikethan Engineering College, Tirupati.AP.

2016:

46. Inaugural address at International Conference on Computation modeling and Security, R L Jalappa Institute of Technology, Doddaballapur, Bangalore, 11th Feb. 2016.
47. An invited talk on High Performance Computing Present and Future: An Overview, National Conference on “Recent Trends and Innovations in Information Science and Technology” , CMR Institute of Management Studies, Bangalore, 03rd March, 2016.
48. An invited talk on Internet of Things - Research issues and Challenges, Two-Day National workshop on “Advances in Wireless Sensor Networks and Internet of Things”, Mangalore Institute of Technology and Engineering, Mangalore, 04th and 05th March, 2016.
49. Valedictory address at National conference on Research, Consultancy and Innovation in Higher Educational Institutions - Issues and Challenges, M.S. Ramaiah College of Arts, Science and Commerce, 05th April, 2016.
50. Resource person at ISTE STTP on Big Data and IoT, Padre Conceicao College of Engineering, Goa, 9th to 13th May, 2016.
51. Inaugural address at Techgeekz, Dept. of ISE, Alvas Engineering College, Moodbidri, 27th August, 2016.
52. Reinforcement lecture on some of the topics in computer networks, HKBK college of engineering, 9th November, 2016.

2017:

53. Talk in 43rd FDP (faculty development programme) on the topic "Advances in Wireless Communication and Networking", at EC Dept., SIT, Tumkur on 28/07/2017.

2018:

54. TEQIP-III Sponsored workshop on Computer Networks and Security, at Sri Jayachamarajendra College of Engineering, Mysuru, Karnataka, 17/07/2018.
55. AICTE sponsored workshop on Data Science and Classification practicing with Python and MATLAB, at JNNCE, Shimoga, Karnataka, on 19/07/2018.
56. FDP on Research opportunities in Data Science, at Dayanand Sagar College of Arts, Science Commerce, Bangalore, Karnataka, on 20/12/2018.

2019:

57. DST Sponsored Two Week Faculty Development Program on "Emerging Trends and Research Challenges in Cyber Security, Cryptanalysis and Cyber-Physical Systems" (June10-22,2019), At Chadawda Ramanamma Engineering College, Tirupati.

2020:

58. A talk on Introduction to Design Thinking & Empathy in Faculty development workshop conducted at CSE,RVCE on 08/02/2020.
59. A talk on Security Models in online open course on Cognitive Security at BMSIT, Bangalore on 18th June 2020.
60. Webinar on Application of Cloud Computing in E-Governance for Govt. of Karnataka officers (Engineers and officers-Water board and Public Relations, Revenue Dept.) on 19th & 20th June 2020 (Administrative Training Institute, Mysore)
61. Webinar on Application of Cloud Computing in E-Governance for Govt. of Karnataka officers (Grade1) on 25th & 26th June 2020 (Administrative Training Institute, Mysore) .
62. A talk on Introduction to Artificial Intelligence and Industrial Applications in RVCE student Internship Program conducted at CSE,RVCE on 05/08/2020.
63. Invited talk on Application of Cognitive theory in Cyber Physical Systems in AICTE Training and Learning (ATAL) ONLINE Faculty Development Program on Artificial intelligence and its applications, Department of Computer science and Engineering, Coimbatore institute of technology, October 5th – 9th , 2020
64. Invited talk on Leveraging Cognitive theory in building intelligent Systems in International Science Fiction Conference, UVCE, Bangalore University, December 08, 2020.

2021:

65. Expert talk on “Literature review” in Academic Research Accelerator Initiative (ARAI) at R V College of Engineering, Bangalore, January 23rd, 2021.
66. Invited talk on Application of AI and ML in Cyber Security, AICTE Training and Learning (ATAL) ONLINE Faculty Development Program on Cyber Security, Department of Master of Computer Applications, JNN College of Engineering, Shimoga, February, 1st – 5th, 2021.
67. Expert talk on “Quantum Machine learning” in National-level workshop on quantum computing fundamentals and applications, at R V College of Engineering, Bangalore, March 5th, 2021.
68. Invited talk on “5G wireless technology and industrial use cases”, 6 Days AICTE – ISTE INDUCTION /REFRESHER PROGRAM on NEXT GENERATION WIRELESS COMMUNICATION: 5G & Beyond, 3rd - 8th May 2021, KSIT, Bangalore.
69. A talk on Quantum computing impact on cybersecurity and solutions at BMSIT, Bangalore on 6th May 2021.
70. Invited talk on Introduction to Quantum Machine Learning, AICTE Training and Learning (ATAL) ONLINE Faculty Development Program on Quantum Computing Algorithms and Machine Learning, Department of Computer Science Engineering, R V College of Engineering, Bangalore, 5th August 2021.
71. Technical Talk On "Influence of role model in self-development", Reva University, 14th August 2021.
72. Technical Talk on “Quantum Computing fundamentals and Machine learning”, FDP on Quantum Information System and Machine Learning, MSRIT, Bangalore, 23rd August 2021.
73. Invited talk on AI and Cognitive Security for Cyber Security, AICTE Training and Learning (ATAL) ONLINE Faculty Development Program on Social and Bio-inspired Cyber Threat Intelligence Defense Systems, Department of Information Technology, Sree Vidyanikethan Engineering College, Tirupati, 25th August 2021.
74. Invited talk on Cognitive Security for Cyber Physical Systems, 5-Days Pre-Conference FDP on Cloud Computing and Cyber Security, Amity Institute of Technology, Amity University, Noida, 27th August 2021.
75. Talk on Classical Computing to Quantum Computing, One month Industrial Internship in Quantum Computing, CoE in QC, 01st September 2021.
76. Invited talk on Introduction to AI, Problem Spaces and Searching Techniques, FDP on Artificial Intelligence and Machine learning, SJCIT, Chikkaballapur, 20th September 2021.
77. Invited talk on Quantum Computing essentials, IEEE Bangalore Chapter – Celebrating Computing webinar series, 24th September 2021.
78. Talk on Introduction to Quantum Machine learning, One month Industrial Internship in Quantum Computing, CoE in QC, 29th September 2021.
79. Key-note speaker for the 8-day long summit on ‘Artificial Intelligence: Disrupting the Disruptors’ organized by Checked IT, Monday, September 27, 2021.
80. Talk on Quantum Computing and Automotive Sector, BCIC – Webinar series on Exponential Technologies, 27/11/2021.

81. Talk on Design thinking Implementation by CSE department of RVCE, AICTE-ISTE sponsored one week online induction programme on “Design Thinking to Augment 21st Century Skills” , organized by Dept. of MCA, RVCE, 7th December 2021
82. Invited speaker for IEEE Day, RVCE, 6th October 2021.

2022:

83. Talk on Cognitive Security for Cyber Physical Systems, VGST Sponsored Four Days FDP on Recent Trends in Computational Intelligence and Analytics, RVCE, Bangalore, 17th – 20th , January, 2022.
84. Talk on Quantum Computing, SJCT, Chikkaballapur, 27th May 2022.
85. Key note speaker for the ATAL - FDP on Intelligent Schemes for Cyber Security, UBDT, Davanagere, 12th - 16th, Sept. 2022.
86. Talk on Data Engineering, VTU Sponsored workshop on Data Science and Applications, APS College of Engineering, Bangalore, 5th - 9th , Dec. 2022.
87. Talk on Application of AI in Dentistry, MR Ambedkar Dental College and Hospital, Bangalore, 18th Dec. 2022.

2023:

88. Talk on Generative Adversarial Networks, FDP on Recent Advances in Machine learning Algorithms and Applications, NMIT, Bangalore, 17th Jan. 2023.
- 89.

PH.D. GUIDANCE DETAILS:

<u>No.</u>	<u>Year</u>	<u>Student Name</u>	<u>Title</u>	<u>Status</u>
1	2010	Sadanand Inamdar	A study on some aspects of wireless adhoc networks using smart antenna Techniques.	Completed
2	2010	Jagadamba G	A trust based context aware authentication and security scheme for ubiquitous network system	Completed
3	2011	Seema B Hegde	A study on the application of cognitive models in solving some of the security & routing problems in opportunistic computing	Completed
4	2013	Bhargavi K	Exploring Application of Machine Learning in Improving the Performance of HPC	Completed
5	2015	Jyoti Hurakadli	Application of Neuro Dynamic Programming in developing an efficient virtual machine migration scheme in a cloud computing environment	Completed
6	2019	Brinda	An Intelligent-Agents framework for e-Governance services : Data Analytics and Machine Learning approach	Withdrawn to personal problems

RVCE
M.TECH.

7	2016 (Change of guide in 2021)	Revathi S A	Detection of Cartilage Degeneration in knee Osteoarthritis assessed using MRI Images	Compr Compe
8	2021	Jayashree N	Exploring the Application of Distributed Artificial Intelligence in Improving the Performance of Industrial Internet of Things (IIoT) Applications	Course Compl
9	2023	Pooja C S	Exploring the integration of Blockchain in developing decentralized artificial intelligence-based applications	Waitin Course Examin
10	2023	Rajesh R M	Developing and Integrating Generative AI solutions for Indian AgriTech Services	Waitin Course Examin

DISSERTATION GUIDANCE DETAILS:

Dissertation Year	Student Name	Title	Publication outcome
2021	Vasupradha U	Machine Learning(ML) based application User Interface(UI) and Big Data Comparator	International Journal Paper
2020	Sankirthana Shastry	Delta configuration support for IP Multimedia subsystem Components	International Journal Paper
2018	B Chaitanya Ranjita C	Automation and Optimization of PCA Regression flow for Prime Time Implementation of cluster routing in WSN with fault tolerance using virtual cluster head technique	International Journal Paper
2017	Athri G Rao	Application of machine learning to model parameter estimation	National Conference paper