

## Dr. Bhargavi K

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### Education

	Degree	Year	Institute	Specialization
1	B. E.	2009	Channabasaveshwara Institute of Technology	CSE
2	M.Tech	2012	Siddaganga Institute of Technology, Tumkuru	CSE
3	Ph.D.	2020	Siddaganga Institute of Technology, Tumkuru	Artificial Intelligence
4	PostDoc	2022	University of Memphis, USA	Artificial Intelligence

### Professional Experience

	Date (from-to)	Designation	Organization
1	22/08/2012-Till the date	Associate Professor	Department of Computer Science and Engineering, Siddaganga Institute of Technology, Tumakuru.

### Affiliations of Professional organizations

Life Member: Indian Society for Technical Education (ISTE)

Life Member: The Institution of Engineers (India) (IEI)

### Courses Taught

#### Undergraduate Courses

- Generative AI and Prompt Engineering
- Artificial Intelligence and Machine Learning
- Machine Learning
- Generative AI and Prompt Engineering

- Data Science with Python
- Bigdata
- Theory of Computation
- Object Oriented Programming with C++
- Object-Oriented Modeling and Design
- Foundations of C programming

#### Postgraduate Courses

- Deep Learning

#### Research Areas

- Artificial Intelligence
- Edge Computing
- High Performance Computing
- Data Science

#### Publications

##### Texbook

Sl. No.	Author(s)	Title	Name of Journal	Volume/Year
1	Asha Gowda Karegowda, Bhargavi K, and Roopa T	Fundamentals of C and Data Structures	CBS Publishers & Distributors Pvt. Ltd	2022

##### Journals

1. Bhargavi K, Shiva G Shiva, "Scalable Resource Provisioning Framework for Fog Computing Using LLM-Guided Q-Learning Approach", Algorithms, 18(4), 230, 2025.
2. Bhargavi K, Shiva G Shiva, "Large Language Model-Guided SARSA Algorithm for Dynamic Task Scheduling in Cloud Computing", Mathematics, 13(6), 926, 2025.
3. Bhargavi K, Shiva G Shiva, "Indetermsoft-set-based d\* extra lite framework for resource provisioning in cloud computing", Algorithms, 17(11), 479, 2024.
4. Bhargavi K, Shiva G Shiva, "Integral-Valued Pythagorean Fuzzy-Set-Based Dyna Q+ Framework for Task Scheduling in Cloud Computing", Sensors (Basel, Switzerland), 24(16), 5272, 2024.
5. Bhargavi K, Shiva G Shiva, "Type-2-Soft-Set Based Uncertainty Aware Task Offloading Framework for Fog Computing Using Apprenticeship Learning", Cybern. Inf. Technol, 23, 38-58, 2023.

6. Bhargavi, K., & Shiva, S. G., "Fuzzy Neutrosophic Soft Set Based Transfer-Q-Learning Scheme for Load Balancing in Uncertain Grid Computing Environments", *Cybernetics and Information Technologies*, 22(4), 35-55, 2022.
7. Bhargavi, K., Sathish Babu, B., & Pitt, J. (2020). Performance modeling of load balancing techniques in cloud: some of the recent competitive swarm artificial intelligence-based. *Journal of Intelligent Systems*, 30(1), 40-58, 2020.
8. Bhargavi, K., & Babu, B. S., "Uncertainty aware resource provisioning framework for cloud using expected 3-SARSA learning agent: NSS and FNSS based approach", *Cybernetics and Information Technologies*, 19(3), 94-117, 2019.
9. Bhargavi, K., Babu, B., & Iyengar, S., "Predicting the brand popularity from the brand metadata", *International Journal of Electrical and Computer Engineering*, 8(5), 3523, 2018.
10. Babu, B. S., Bhargavi, K., & Venkatarm, P., "CAs-based QoS scheme for remote health monitoring", *International Journal of Agent Technologies and Systems (IJATS)*, 5(4), 44-67, 2013.

### Conference Proceedings

1. Palguni T R , Shubha A S, Sadhana T P, Bhargavi K, "QoS Aware Task Scheduling for Fog Computing using Enhanced AO \* Algorithm ", *International Conference on Computing Technologies*, Jyothy Institute of Technology, Bengaluru, 13-14 June 2025.
2. sohan jayarm reddy k, bhargavi k, "Detection of DDOS attacks in fog computing using interpretable quantum-based 2Q learning approach", 3rd international conference on intelligent and innovative technologies in computing, electrical and electronics, bnm institute of technology, bangalore, 16th – 17th jan, 2025.
3. Adarsh M. G., Bhargavi K, "GAN Interactive double reinforcement learning for Identification of Volumetric attacks in cloud computing", *IEEE Fifth International Conference on Advances in Electronics, Computers and Communications (ICAIECC)*, Bengaluru, India, 2023.
4. Nirupama Mallikarjunaiah, Bhargavi K, "Processing Delay Optimization for Data Intensive Applications for Fog/Cloud Computing using Double Reinforcement Learning ", *IEEE Fifth International Conference on Advances in Electronics, Computers and Communications (ICAIECC)*, Bengaluru, India, 2023.
5. Vaishnavi S, Satish Maruti Magadum, and Bhargavi K, "Forward-Backward Inverse Reinforcement Learning for Load Balancing in SDN", *AICTE Sponsored IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON-2023)*, Bengaluru, 2023.
6. Bhoomika S P, Likhitha S, Chandhana H S, Kavya S A, and Bhargavi K, "2Q-Learning Scheme for Resume Screening ", *4th International Conference of Emerging Technologies (INCET)*, Belagavi, Karnataka, 2023.
7. Adarsh M. G., Bhargavi K, "Reinforcement Learning-Based Bonobo Optimizer for Efficient Load Balancing in Cloud Computing ", *4th International Conference of Emerging Technologies (INCET)*, Belagavi, Karnataka, 2023.
8. Bhargavi Krishnamurthy, Sajjan G. Shiva, "Handling Node Discovery Problem in Fog Computing Using Categorical Algorithm with Explainability ", *IEEE World AI IoT Congress (AllIoT)*, 2023.

9. Raktim Ranjan Das, Bhargavi Krishnamurthy, and Saikat Das, "Securing IoT Devices using Ensemble Machine Learning in Smart Home Management System", IEEE Symposium Series on Computational Intelligence (IEEE SSCI), Singapore, 2022.
10. Bhargavi Krishnamurthy, Sajjan G. Shiva Saikat Das, "MVE-based Reinforcement Learning Framework with Explainability for improving Quality of Experience of Application Placement", IEEE World AI IOT Congress (AllIoT), WA, USA, 2022.
11. Bhargavi Krishnamurthy, Sajjan G. Shiva, "Energy Efficient Double Critic-Deep Deterministic Policy Gradient Framework for Fog Computing", IEEE World AI IOT Congress (AllIoT), Seattle, WA, USA, 2022.
12. Bhargavi Krishnamurthy, Sajjan G. Shiva, "Man-in-the-Middle attack Explainer for Fog computing using Soft Actor Critic Q-Learning Approach", IEEE World AI IOT Congress (AllIoT), Seattle, WA, USA, 2022.
13. Bhargavi Krishna Murthy, Sajjan G. Shiva, "Double-State-Temporal Difference Learning for Resource Provisioning in Uncertain Fog Computing Environment", IEEE 12th Annual Information Technology, Electronics and Mobile Communication conference (IEEE IEMCON), Vancouver, Canada, 2021.
14. Bhargavi Krishna Murthy, Sajjan G. Shiva, "Scalable Hindsight Experience Replay based Q-learning Framework with Explainability for Big Data Applications in Fog Computing", IEEE 12th Annual Computing and Communication Workshop and Conference (CCWC), Las Vegas, NV, USA., 2022.
15. D V Nishanth, Satish, Niteesh S Narasimha, Sandesh H J, and Bhargavi K, "CA based Student-Alumni Management System", International Conference on Communication, Control and Information Sciences (ICCISc-2021), Government Engineering College, Idukki (GECI), IEEE, Kerala, India, 2021.
16. Prarthana V, Lavanya P, Namana J Jain, Nagaditya L P, Nagavishnu H, Dr. Bhargavi K, "Digital Twin: A Bird View", 3rd International Conference on Inventive Research in Computing applications ICIRCA, Coimbatore, 2021
17. Sartak Mishra, Bhargavi K, "An AI Model for Neurodegenerative diseases", International Conference on Computer Communication and Informatics (ICCCI), Coimbatore, 2021.
18. Narasimha Pai Kasturi, Nishanth P, Rakshith R, Pavan V. R, and Bhargavi K, "Tracking the Transshipment of Goods using Cognitive Agents", International Conference on Intelligent Computing and Control Systems (ICICCS), IEEE, Vaigai College of Engineering, Chennai, 2020.
19. Bhargavi K, Sathish Babu B, "Load Balancing Scheme for the Public Cloud using Reinforcement Learning with Raven Roosting Optimization Policy (RROP)", 4th International Conference on Computational Systems and Information Technology for Sustainable Solution, RVCE, Bangalore, 2019.
20. Vatsalya S P, Vidhya Sree N, Chethan Malode C M, and Bhargavi K, "Apprenticeship Learning based Load Balancing Technique for Cloud Environment", International Conference on Intelligent Computing, Information and Control Systems (ICICCS-2019), Secunderabad, India, 2019.
21. Dinesh K R Navada, Ganesh S, and Bhargavi K, "A High Precision Deep-CNN Framework for Classification of Metabolic Bone Diseases among Women

- “,International Conference on Communication and Electronics Systems (ICCES 2018), IEEE, Coimbatore, 2018.
22. Lathashree H., Niveditha J. Moka Katte, Pooja K. P., Bhargavi K, and B. Sathish Babu, “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), Springer CCIS, (Scopus Indexed), Uttaranchal University, Dehradun, Uttarakhand, India, 2018.
  23. Lathashree H., Niveditha J. Moka Katte, Pooja K. P., B. Sathish Babu, and Bhargavi K, “Multiple CAs based Framework with ANN for Load Balancing in Cloud Computing Environment “,IEEE International Conference for Convergence in Technology (I2CT), IEEE, Mangalore, 2018.
  24. K Chethan Malode C. M., Bhargavi K, Gunasheela B. G., Kavana G., Sushmitha R., “Soft set and Fuzzy Rules enabled SVM Approach for Heart Attack Risk Classification among Adolescents “,4th International Conference on Computing, Communication, Control And Automation, IEEE, Pimpri Chinchwad College Of Engineering, Pune, 2018.
  25. Dayashankar, Bhargavi K, “Old Age Health Risk Prediction and Maintenance via IoT Devices and Artificial Neural Network “,Sixth international conference on frontiers in Intelligent computing theory and applications (FICTA), Springer, Kalinga Institute of Industrial Technology, Buneswar, 2017.
  26. Vaishnavi K.R., Bhargavi K, Vadla saisupriya, Vidya, soumya, “Diagnostic Analysis of Breast Cancer in Non-Cancer history patients using Fuzzy MapReduce Framework “,Second International Conference on Computational Systems and information technology for Sustainable Solutions (CSITSS), IEEE(Scopus indexed), RVCE, Bangalore, 2017.
  27. Jagatjyoti G Tuladhar, Ashish Gupta, Sachit Shrestha, Ujjen Man Bania, and K. Bhargavi, “Predictive Analysis of E-Commerce Products “,International Conference on Intelligent Computing and Communication, Springer, MIT college of Engineering, Pune, 2017.
  28. Bhargavi k, Chaithra H. S, “Join Queries Translation from SQL to XPath “,IEEE International Conference ON Emerging Trends in Computing, Communication and Nanotechnology (ICECCN), IEEE, Tirunelveli, India, 2013.
  29. K. Bhargavi, B. Sathish Babu, “CAs-based QoS Scheme for Remote Health Monitoring over WMSN “,International Conference on Advanced Computing, Networking and Security, NITK Surathkal, 2012.

#### Invited Lectures, talks and workshops

1. “Basics of Python”, Sridevi college of Engineering, Tumakuru, 09-05-2022 to 10-05-2022.
2. “Software engineering for machine learning systems”, Graduate classes, Department of Computer Science, University of Memphis, Fall semester 2021 (09-08-2021 to 22-02-2022).
3. “Report writing using LaTeX”, ISTE students chapter, SIT, Tumakuru, 10-03-2019.

4. "Predictive analytics using Python Anaconda Navigator", AICTE-ISTE sponsored Induction/Refresher Programme on Data Science and Classification Practicing with Python and MatLab, Department of ISE, Jawaharlal Nehru National College of Engineering, Shivamoga, 19-07-2018.
5. "Soft Computing and its Research applications", Faculty development workshop on machine learning and its applications, Dept. of Electrical Engineering, Siddaganga Institute of Technology, 2017.
6. "ICT in Engineering", Faculty development workshop on application of ICT in engineering", department of civil engineering, SIT, Tumakuru, 21-12-2016 to 26-12-2016.