

Dr. Sheela S

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Education

	Degree	Year	Institute	Specialization
1	Ph.D	2025	University Visvesvaraya College of Engineering, Bangalore University	Fog Computing
2	M Tech	2017	Siddaganga Institute of Technology, Tumakuru	Computer Science and Engineering
3	B E	2006	Dayananda Sagar College of Engineering, Bengaluru	Computer Science and Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	3 rd November 2023 Till date	Assistant Professor	Siddaganga Institute of Technology, Tumakuru - 572103
2	24 th Sep 2018 to 30 th Sep 2020	Assistant Professor	Acharya Institute of Technology, Bengaluru - 560130
3	5 th Apr 2017 to 21 st Sept 2018	Assistant Manager	National Payments Corporation of India, Bengaluru
4	2 nd Aug 2006 to 26 th Dec 2014	Technical Lead	HCL Technologies Ltd., India, Bengaluru

Positions held

- *During Tenure at SIT, Tumakuru:*
ISO audit coordinator, Lab coordinator, ARAS coordinator, Browse Event Management coordinator etc.
- *During Tenure at ACIT, Bengaluru:*

NBA Coordinator, Department IA Coordinator, Project Coordinator etc.

- *During Tenure at NPCI, Bengaluru:*
Devops manager in the department of Development Center and Mobility.
- *During Tenure at HCL Technologies Ltd., Bengaluru:*
Change Manager in the department of BFSI, domain of Investment Banking.

Certificates of Eligibility for Assistant Professor

- *National Eligibility Test (NET)* from Central Board of Secondary Education in the subject of Computer Science in December 2020.
- *Karnataka State Eligibility Test (KSET)* from Mysore University in the subject of Computer Science and Applications in July 2021.

Affiliations of Professional organizations

- IEEE , Student membership
- IAENG - International Association of Engineers membership
- CSTA – Computer Society Teachers Association membership
- ISTE – Indian Society For Technical Education

Awards and Honors

- Won “Live Wire” and “Spot” awards for the outstanding commitment shown towards
keeping the application up with minimal downtime during deployments and issues.

Courses Taught

Undergraduate Courses

- Data Structures and Applications
- Design and Analysis of Algorithms
- Database Management Systems
- Advanced Data Structures
- Java Script
- Unix and Shell Programming
- Operating Systems
- Web Technologies

Postgraduate Courses

- Advanced Operating Systems

Research Areas

- Fog Computing
- Cloud Computing
- Internet of Things,
- Edge Computing,
- Reinforcement learning

Publications

Journals

- Sheela S, Akshatha P S, Kushalatha M and Dilip Kumar S M, “Towards a Secure Future: An Integrated Framework for PII Detection Using NLP and Visual Analysis”, IEEE Access (ISSN: 2169-3536, Impact Factor: 3.6, SJR: Q1)
- Sheela S and Dilip Kumar S M, “Learning Framework for Joint Optimal Node Placement and Resource Management in Dynamic Fog Environment”, International Journal of Sensors Wireless Communications and Control, Bentham Science Publishers, vol. 2, no. 1, pp. 144-160, Jun. 2024 (ISSN: 2210-3279, IF: 0.158, SJR Rank: Q3).
- Sheela S and Dilip Kumar S M, “Dynamic Application Placement and Resource Optimization Technique for Heterogeneous Fog Computing Environments”, International Journal of Grid and Utility Computing, Inderscience Publishers, Accepted (In press) (ISSN: 1741-8488, IF: 0.4, SJR Rank: Q3).
- Sheela S and Dilip Kumar S M, “Modelling Resource-Aware Fault Tolerant Task Scheduling in Dynamic Fog Environment: A Tournament Selection Approach”, Intelligent Decision Technologies, IoS Press, Accepted (In press) (ISSN: 1872-4981, IF: 0.6, SJR Rank: Q3).
- Sheela S and Dilip Kumar S M, “Autoencoders for Anomaly-Based Adaptive Resource Autoscaling in Dynamic Fog Environments”, International Journal of Information Technology, Springer, Accepted (In press) (ISSN: 2511-2104, IF:1.8, SJR Rank: Q2).
- Sheela S and Dilip Kumar S M, “Collaborative Model For Task Scheduling And Resource Allocation In Fog-Cloud Network”, International Game Theory Review, World Scientific Publisher, vol. 27, no. 2, pp. 1-26, Jan. 2025 (ISSN: 1793-6675, IF: 0.2, SJR Rank: Q4)
- Sheela S, B. R. Harshitha and Dilip Kumar S M, “Multiple Multicast Architecture for IoT enabled XMPP based Applications”, Journal of Advances

in Shell Programming, STM Publications (Accepted in August 2023, ISSN: 2395-6690, Impact Factor : 6.128)

- Sheela S, and Ravi V, “Efficient XML Interchange as Encoding Scheme in DDS”, vol. 6, issue 5, June. 2017.

Conference Proceedings

- Sheela S, Dharmendra Chouhan and Dilip Kumar S M, “Computational Framework for Node Placement and Bandwidth Optimization in Dynamic Fog Computing Environments”, IEEE 19th India Council International Conference (INDICON), IEEE Xplore, Kochi, India, ISBN: 978-1-6654-5272-4, pp. 1-6, Dec 2022.
- Sheela S and Dilip Kumar S M, “Dynamic Application Placement Technique for Intelligent Heterogeneous Fog Environment”, IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE), IEEE Xplore, Bangalore, India, ISBN: 978-1-6654-6491-8, pp. 1-6, Dec. 2022.
- B. R. Harshitha, N. B. Mehta, S. Rai, Deepti, Sheela S and Dilip Kumar S M, “Multiple Multicast Architecture for XMPP based Applications”, 2022 3rd International Conference for Emerging Technology (INCET), Belgaum, India, 2022, pp. 1-7, doi: 10.1109/INCET54531.2022.9824745.
- Sheela S, Megha Dayanand, Kusuma M, Chaithrashree S and Raksha P, ” ”, 3rd International Conference on Emerging Computation and Information Technologies (ICECIT), Karnataka, India, 2025.
- Sheela S, Swathika R and Akshatha P S, ”STOCKSENSE: Real-Time AI Stock Market Visualization and Prediction”, 2026 International Conference on Sustainable Engineering and Technology Innovations (ICSETI), Noida, India, 2026.

Book Chapters

- Sheela S and Akshatha P S, “Enhancing MQTT Performance through Scalable Data Aggregation in IoT e-Healthcare Applications”, Published in LNNS, Springer, 8th International Conference on Innovative Computing and Communication (ICICC), New Delhi, India, volume 1670, 2025.
- Sheela S and Dilip Kumar, S M, “Framework for efficient Task Scheduling and Resource allocation in Fog-Computing Network: Alliance Formation using Game Theory Approach”, Published in LNNS, Springer, 3rd International Conference on Data, Electronics and Computing (ICDEC-2024) (SJR: Q4).
- Sheela S, Ganesh Rakshith G and S M Dilip Kumar, “Anomaly detection based Autoscaling Mechanism for Fog Computing”, Published in Lecture Notes in

Networks and Systems (LNNS), Springer, Conference on Frontiers in Computing and Systems (COMSYS) - 2023 (SJR: Q4).

- Sheela S, Vishnu Priya G M and Dilip Kumar, S M, "Memory-Aware Stochastic Automata for Low-Latency Task Scheduling in Fog Computing", Published in LNNS, Springer, Conference on Computing and Network Communications (COCONET) - 2023 (SJR: Q4).
- Akshatha P S, Sheela S, "Computational Intelligence in Wired and Wireless Networks", Accepted for publication in Taylor and Francis - 2025 (SJR: Q4).

Reviewer of Journal

- Contributed as a Reviewer for "Journal of Autonomous Intelligence", (ISSN 2630-5046; CiteScore 1.1), October 2023.

Patents

- Akshatha p S, Sheela S, S M Dilip Kumar, "A Unified Multi-API Integrated System for Knowledge Processing and Local Execution", Accepted on 04.0.2025.
- Kushalatha M.R, R Swathika, Sheela S, Akshatha P.S, S M Dilip Kumar, "Secured IoT Asset Surveillance with AI-Integrated LoRaWAN - Blockchain Mechanisms", Indian Patent, No.: 202441075038, Publication date: 18.10.2024.
- Nagaveni V, R Sathiyaraj, Shruthi U and Sheela S, "A Novel Method for Automated Plant Disease Detection and Diagnostic System Using Parallel ANN", Indian Patent, No.: 202041010556 A, Publication date: 20.03.2020.

Invited Lectures, talks and workshops - NIL

- Kagada 2022, "Technical Paper Writing Workshop", University Visvesvaraya College of Engineering, Bengaluru, 20.10.2022.