

Dr. Ashwini B P

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Education

	Degree	Year	Institute	Specialization
1	B. E.	2005	Oxford College of Engineering, Bengaluru	CSE
2	M.Tech	2010	Rashtreeya Vidyalaya College of Engineering(RVCE), Bengaluru	CSE
3	Ph.D.	2023	Siddaganga Institute of Technology, Tumkuru	Machine Learning

Professional Experience

	Date (from-to)	Designation	Organization
1	22/08/2012-Till the date	Assistant Professor	SIT
2	From 01/09/2005 16/08/2012	Lecturer	SSIT, 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
- Theory of Computation
- Data Science with Python
- Bigdata
- System Software and Compiler Design

- Object Oriented Programming with C++
- Object-Oriented Modeling and Design
- Foundations of C programming

Postgraduate Courses

- Protocol Engineering

Research Areas

- Machine Learning
- Intelligent Transportation
- Engineering Education
- Data Science

Publications

Journals

1	Ashwini Bukanakere Prakash, Sumathi, R. ., & Satyanarayana Sudhira, H. (2024). "Public Transit Bus Travel Time Variability Analysis Using Limited Datasets: A Case Study". <i>Current Applied Science and Technology</i> , 24(5), e0257174. https://doi.org/10.55003/cast.2024.257174
2	Shwetha A.N., Ashwini B.P., Savithramma R.M., Prabodh C.P., "An Automated Certificate Validation System Using Blockchain Technology for the Hiring Process", <i>International Journal of Engineering Trends and Technology</i> , 72, 2024
3	Savithramma, R.M., Anitha, C.L., Sanjay Kumar, N.V. Ashwini B P., <i>et al.</i> Automatic attack detection in IOT environment using relational auto encoder with enhanced ANFIS. <i>Int. j. inf. tecnol.</i> 16 , 5307–5315 (2024). https://doi.org/10.1007/s41870-024-02141-0
4	Kumar Sanjay N V., Anitha C L., Ashwini B P., Savithramma R M., Kamble Subhash., "Performance Benchmarking of Redpanda an event streaming platform using SBK and Open Messaging Frameworks", <i>Journal of Electrical Systems</i> , 20., 2024
5	Sumathi, R., Savithramma, R. M., & B P, A. (2025). A Systematic Framework for Designing and Implementing Outcome-Based Curriculum in Engineering Education: A Comprehensive Approach. <i>Journal of Engineering Education Transformations</i> , 37, 216–224. Retrieved from https://journaleet.in/index.php/jeet/article/view/2330
6	Ashwini B P ., R Sumathi., Sudhira H S., "Hybrid Travel Time Estimation Model for Public Transit Buses using Limited Datasets", <i>IAES International Journal of Artificial Intelligence</i> ., 12., 2023., http://doi.org/10.11591/ijai.v12.i4.pp1755-1764
7	Sumathi R., Savithramma R. M. & Ashwini B. P. (2023). Curriculum Compliance Improvement Model for Addressing Program Outcomes in Engineering Education. <i>Journal of Engineering Education Transformations</i> , 37(1), 10.16920/jeet/2023/v37i1/23127
8	B. P., Ashwini. ., Sumathi, R. ., & H. S., S. . (2023). Analyzing Travel Time Reliability of a Bus Route in a Limited Data Set Scenario: A Case Study. <i>International</i>

	<i>Journal of Intelligent Systems and Applications in Engineering</i> , 11(2), 30–39. Retrieved from https://www.ijisae.org/index.php/IJISAE/article/view/2592
9	B. P. Ashwini, R. Sumathi, en H. S. Sudhira, “A Dynamic Model for Bus Arrival Time Estimation based on Spatial Patterns using Machine Learning ”, <i>Int. J. Eng. Trends Technol</i> , vol 70, no 9, bll 185–193, 2022, doi: 10.14445/223153811IJETT-V7019P219.

Conference Proceedings

1	N. Pavitha, R. M. Savithramma, B. P. Ashwini, A. Mankawade, Y. Naik and Y. Bedmutha, "Intelligent Predictive Maintenance for Smart Building Systems," <i>2024 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS)</i> , Erode, India, 2024, pp. 1178-1183, doi: 10.1109/ICSSAS64001.2024.10760900.
2	A. A. Khan, M. D. Sha Fahad, R. M. Savithramma and B. P. Ashwini, "Predictive Modeling for Heart Disease Detection using Machine Learning Algorithms," <i>2024 First International Conference on Software, Systems and Information Technology (SSITCON)</i> , Tumkur, India, 2024, pp. 1-6, doi: 10.1109/SSITCON62437.2024.10796312.
3	P. Nooji, S. R. M, Ashwini. B. P and M. Pinto, "Boosting Multi-Class Emotion Detection Through Hyperparameter Optimization," <i>2024 International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS)</i> , Bengaluru, India, 2024, pp. 1522-1528, doi: 10.1109/ICICNIS64247.2024.10823278.
4	P. Nooji, S. R M, Ashwini. B P and M. Pinto, "Natural Language Processing and Collocations for Generating Enhanced Health Data Insights," <i>2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS)</i> , Gobichettipalayam, India, 2024, pp. 427-432, doi: 10.1109/ICUIS64676.2024.10866531.
5	U. P. Jakarbet, A. A. Khan, S. S. P, S. R. M and Ashwini. B. P, "Comparative Analysis of Various Game Theory Algorithms for CPU and GPU Resource Allocation," <i>2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS)</i> , Gobichettipalayam, India, 2024, pp. 129-134, doi: 10.1109/ICUIS64676.2024.10866186.
6	C. A. Sohana, Suha Saeed, S. U. Thanushree, R. Sumathi, B. P. Ashwini, R. M. Savithramma; Analysing trends and forecasting rainfall in subregions of Karnataka using machine learning models. <i>AIP Conf. Proc.</i> 14 February 2025; 3162 (1): 020012. https://doi.org/10.1063/5.0242414
7	S. R M, A. B P, A. B P, U. P. Jakarbet, S. S P and A. A. Khan, "Machine Learning Based Public Transit Bus Arrival Time Prediction System," <i>2024 4th International Conference on Ubiquitous Computing and Intelligent Information Systems (ICUIS)</i> , Gobichettipalayam, India, 2024, pp. 1003-1008, doi: 10.1109/ICUIS64676.2024.10866233.

8	B. P. Ashwini, R. Sumathi and R. M. Savithramma, "Machine Learning Approaches for Rainfall Trend Analysis and Forecasting in Subregions of Karnataka," <i>2024 International Conference on Data Science and Network Security (ICDSNS)</i> , Tiptur, India, 2024, pp. 01-07, doi: 10.1109/ICDSNS62112.2024.10691025.
9*	U. P. Jakarbet, S. S P, S. R M and A. B P, "An Empirical Analysis of Machine Learning Algorithms for Agricultural Crop Prediction," <i>2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)</i> , Kirtipur, Nepal, 2024, pp. 1782-1790, doi: 10.1109/I-SMAC61858.2024.10714677.
10	P. N, A. Mankawade, S. R. M and A. B. P, "Cyclone Intensity Estimation Using CNN," <i>2023 International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS)</i> , Erode, India, 2023, pp. 164-169, doi: 10.1109/ICSSAS57918.2023.10331821.
11	Ashwini, B.P., Savithramma, R.M., Sumathi, R., Sudhira, H.S. (2023). Information and Communication Technology in Transit Signal Priority Systems: A Review. In: Kaiser, M.S., Xie, J., Rathore, V.S. (eds) Information and Communication Technology for Competitive Strategies (ICTCS 2022). Lecture Notes in Networks and Systems, vol 615. Springer, Singapore. https://doi.org/10.1007/978-981-19-9304-6_71
12	Ashwini. B. P, Savithramma. R. M and R. Sumathi, "Bus Dwell Time Forecasting using Machine Learning Models," <i>2023 7th International Conference on Trends in Electronics and Informatics (ICOEI)</i> , Tirunelveli, India, 2023, pp. 1156-1161, doi: 10.1109/ICOEI56765.2023.10125868.
13	C. P, A. H. Patil, B. V K, Ashwini. B P and R. Sumathi, "A Comprehensive Survey on Parametric and Non-Parametric Machine Learning Approaches for Bus Arrival Time Prediction," <i>2022 4th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N)</i> , Greater Noida, India, 2022, pp. 816-822, doi: 10.1109/ICAC3N56670.2022.10074390.
14	Ashwini BP, Savithramma RM, Sumathi R (2022) Artificial intelligence in smart city applications: an overview. In: 6th international conference on intelligent computing and control systems (ICICCS), 2022, pp 986–993. https://doi.org/10.1109/iciccs53718.2022.9788152
15	Savithramma R M, Ashwini B P, Sumathi R (2022) Smart mobility implementation in smart cities: a comprehensive review on state-of-art technologies. In: 2022 4th international conference on smart systems and inventive technology (ICSSIT), pp 10–17. https://doi.org/10.1109/ICSSIT53264.2022.9716288
16	B. P. Ashwini, R. Sumathi, and H. S. Sudhira, "Bus Travel Time Prediction: A Comparative Study of Linear and Non-Linear Machine Learning Models," <i>J Phys Conf Ser</i> , vol. 2161, no. 1, 2022, doi: 10.1088/1742-6596/2161/1/012053.
17	itha, B. P. Ashwini, R. M. Savithramma, and R. Sumathi, "A Comparative Study of Re-Sampling Techniques on Machine Learning Model Performance," <i>13th International Conference on Advances in Computing, Control, and</i>

	<i>Telecommunication Technologies, ACT 2022</i> , vol. 8, pp. 227–234, 2022.
18	Ashwini BP, Sumathi R (2020) Data sources for urban traffic prediction: a review on classification, comparison and technologies. In: Proceedings of the 3rd international conference on intelligent sustainable systems (ICISS), pp 628–635. https://doi.org/10.1109/ICISS49785.2020.9316096
19	D. N. Spoorthi and B. P. Ashwini, "Efficient Neural Network For Real Semantic Segmentation," <i>2019 3rd International conference on Electronics, Communication and Aerospace Technology (ICECA)</i> , Coimbatore, India, 2019, pp. 340-343, doi: 10.1109/ICECA.2019.8822228.
20	K. T. Vidya and B. P. Ashwini, "Survey on Real Time Traffic Analysis on Big Data," <i>2018 2nd International Conference on Trends in Electronics and Informatics (ICOEI)</i> , Tirunelveli, India, 2018, pp. 852-858, doi: 10.1109/ICOEI.2018.8553757.
21	Aniruddha Prabhu, B.P., Ashwini, B.P., Anwar Khan, T., Das, A. (2019). Predicting Election Result with Sentimental Analysis Using Twitter Data for Candidate Selection. In: Saini, H., Sayal, R., Govardhan, A., Buyya, R. (eds) <i>Innovations in Computer Science and Engineering. Lecture Notes in Networks and Systems</i> , vol 74. Springer, Singapore. https://doi.org/10.1007/978-981-13-7082-3_7
22	Rakshitha C M and Ashwini B P, "A survey on detection and mitigation of zombie attacks in cloud environment," <i>2016 2nd International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT)</i> , Bangalore, India, 2016, pp. 764-769, doi: 10.1109/ICATCCT.2016.7912102.

Invited Lectures, talks and workshops

1. Lecture series titled “Syntax Analysis Demystified” from March 15th, 2024, to March 20th, 2024, organized by the Department of Artificial Intelligence, Vishwakarma University. Pune Maharashtra, India
2. Resource person at 3 days Faculty Development Program titled “Generative AI and LLMs”, from 08/05/2025 to 10/05/2025, organized by Department of Computer Science and Engineering, SSIT, Tumakuru.