



JSS Mahavidyapeetha

# JSS Academy of Technical Education


Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060  
www. Jssateb.ac.in



## FACULTY PROFILE

Department: Computer Science & Engineering

### 1. Personal Details

NAME	Dr. PRADEEP H K	
DEPARTMENT	Computer Science & Engineering	
DESIGNATION	Associate Professor	
PHONE	+91 9738456263	
EMAIL ID	<a href="mailto:hkpradeep@jssateb.ac.in">hkpradeep@jssateb.ac.in</a>	
Date of Joining (JSSATEB)	19-01-2012	

### 2. Experience

Total Experience in Years	Teaching: 16 Years	Industry: 0 Years	Research: 6 Years
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### 3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.E.	Computer Science & Engineering	2007	Nagarjuna College of Engineering & Technology, Bengaluru, Karnataka INDIA	Visvesvaraya Technological University, Belagavi, Karnataka, India
M.Tech.	Computer Science & Engineering	2010	Dr. Ambedkar Institute of Technology, Bengaluru, Karnataka INDIA	Visvesvaraya Technological University, Belagavi, Karnataka, India
Ph.D.	Computer Science & Engineering	2022	Visvesvaraya Technological University, RRC- Belagavi, Karnataka, India	Visvesvaraya Technological University, Belagavi, Karnataka, India

#### 4. Research & Publications

Papers Published in Web of Science indexed Journals	International: 04	National: Nil
Papers Published in SCOPUS indexed Journals	International: 01	National: Nil
Papers Published in other Journals	International: 03	National: Nil
Papers Presented in Conferences / Symposium	International:04	National: 02
Book chapters Published	Name of the book: Advances in Intelligent Systems and Computing Publisher: Springer Nature Year of Publication:2020	

#### 5. Research Guidance

PhD Guide? Give field & University	Artificial Intelligence	Visvesvaraya Technological University, Belagavi, Karnataka, India
PhDs / Projects Guided		Projects at Bachelor's Level: 25

#### 6. Grants

##### i. Funds Received (Projects & FDPs)

SI No	Name of the Project	Name of the Principal Investigator/ Co-investigator	Year of Award	Amount Sanctioned	Duration of the project	Name of the Funding Agency
1.	Design of Climate Smart Agriculture (CSA) based Surface Irrigation System to Improve Water Productivity: A study of select area of Karnataka	<u>Principal Investigator:</u> <ul style="list-style-type: none"> <li>Dr. Pradweep H K, Associate Professor, CSE, JSSATEB</li> </ul> <u>Co-investigators:</u> <ul style="list-style-type: none"> <li>Dr. Adinarayana Jagarlapudi, Professor, CSRE, IIT, Bombay</li> <li>Dr. Karthikeyan Lanka, Assistant Professor, CSRE, IIT, Bombay</li> <li>Dr. Deepak Singh, Scientist, ICAR-IISWC, Dehardun</li> <li>Dr. S S Shirahatti, Professor &amp; University HoD of Agricultural Engineering, University of Agricultural Sciences, Dharwad</li> <li>Dr. Sreenatha M, Assistant Professor, CSE, JSSATEB</li> </ul>	2023	Rs.13,50,000/-	06 Months	Indian Council of Social Science Research (ICSSR), New Delhi
2.	Ubiquitous precision crop management using agricultural IoT and UAV	<u>Principal Investigator:</u> <ul style="list-style-type: none"> <li>Dr. Arvind, Professor, ECE, JSSATEB</li> </ul> <u>Co-investigators:</u> <ul style="list-style-type: none"> <li>Dr. Prabhudev Jagadeesh M.P, Professor, CSE, JSSATEB</li> <li>Dr. Pradweep H K, Associate Professor, CSE, JSSATEB</li> </ul>	2022	Rs. 10,00,000/-	2 Years	Visvesvaraya Technological University (VTU), Belagavi, Karnataka
3.	Internet of Things (IoT) and Drone Technology Applications in Digital Agriculture	<u>Principal Investigator:</u> <ul style="list-style-type: none"> <li>Dr. Pradweep H K, Associate Professor, CSE, JSSATEB</li> </ul> <u>Co-investigator:</u> <ul style="list-style-type: none"> <li>Dr. S R Desai, Professor, University of Agricultural Sciences, Dharwad</li> </ul>	2023	Rs. 3,50,000/-	06 Days FDP	AICTE, New Delhi ATAL FDP
4.	Artificial Intelligence & Machine Learning Techniques for Precision Agriculture	<u>Principal Investigator:</u> <ul style="list-style-type: none"> <li>Dr. Prabhudev Jagadeesh M.P, Professor, CSE, JSSATEB</li> </ul> <u>Co-investigators:</u> <ul style="list-style-type: none"> <li>Dr. Pradweep H K, Associate Professor, CSE, JSSATEB</li> </ul>	2022	Rs. 3,00,000/-	15 Days FDP	AICTE, New Delhi ATAL FDP

## ii. Patents

Sl.no	Patent Application number	Date of filing	Invention titled	Patent Filed in the Name	Inventors	Status
1	202241052305	13-09-2022	CONTEXTLESS GRAMMAR-BASED SYSTEM FOR SOIL TEXTURE CLASSIFICATION	JSS ACADEMY OF TECHNICAL EDUCATION, Bengaluru	Pradeep H K, Archana, B.K, Dr. K. Rajan, Dr. Madhu, M.	RQ Filed

## 7. Awards Received

1	CERTIFICATE OF ACHIEVEMENT received from ICAR - IARI, <b>Ministry of Agriculture &amp; Farmers' Welfare, Govt. of India.</b>
2	A software product is developed for soil texture classification and it's certified by <b>ICAR-Indian Institute of Soil &amp; Water Conservation (IISWC), Ministry of Agriculture, Govt. of India, Research Center, Sunabeda, Koraput, Odisha, India.</b>
3	Recognized as Reviewer for SCI indexed Elsevier & Springer Journals.

## 8. Publications

### i. International Journals

Sl. No.	Title of the Paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1	Cognitive Computing Models for Estimation of Reference Evapotranspiration: A Review.	Pradeep HK, Balasangameshwara J, Sheshshayee MS, Desai S, Archana BK	Cognitive Systems Research.	Volume No. 70 Issue No & Year : December 2021	<b>WOS &amp; SCOPUS</b>	3.9	Elsevier
2	Irrigation Practices and Soft Computing Applications: A Review	Pradeep H K, Jasma Balasangameshwara, M.S. Sheshshayee, K. Rajan	Statistics and Applications	Volume No. 19 Issue No. 2 Year : 2021	<b>WOS</b>	-	Society of Statistics, Computer and Applications
3	Automation of USDA Triangle Soil Texture Classification Using Finite State Machine: A Novel Conceptual Modeling Approach	Pradeep H K, Jasma Balasangameshwara, K. Rajan, Madhu, M., Archana, B.K	Statistics and Applications	Volume No. 19 Issue No. 2 Year : 2021	<b>WOS</b>	-	Society of Statistics, Computer and Applications
4	Soft Computing based DECEL Model for Optimization of Water Usage in Irrigation Management	Pradeep H K, Jasma Balasangameshwara, K. Rajan, Archana, B.K	Statistics and Applications	Volume No. 20 Issue No. 2 Year : 2022	<b>WOS</b>	-	Society of Statistics, Computer and Applications
5	Soil Moisture Based Automatic Irrigation System to Improve Water	Pradeep H K, Jasma Balasangameshwara, K Rajan, Prabhudev Jagadeesh	Journal of AgriSearch	7 (4), 2020	-	-	Journal of AgriSearch

	Productivity						
6	An innovative Approach for city bus location with Route Navigation System using Android	Ravi P , Rohitaksha K , Abhilash C B and Pradeep H K	European Journal of Advances in Engineering and Technology	2(3), 2015.	-	-	European Journal of Advances in Engineering And Technology
7	An Email based offline Download Manager for Large Distributed File using Hadoop Map Reduce Framework	Pradeep H K, Rohitaksha K, Abhilash C B	SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE)	1(10), 2014	-	-	SSRG International Journal of Computer Science and Engineering
8	A Novel Approach of New Hybrid Cloud	Abhilash C B, Rohitaksha K, Niranjana C K, Pradeep H K	The International Journal of Computer Trends and Technology	5(3), 2013	-	-	The International Journal of Computer Trends and Technology

## ii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1	Irrigation System Automation using Finite State Machine Model and Machine Learning Techniques	Pradeep H K Prabhudev Jagadeesh M. S. Sheshshaye Desai Sujeet	International Conference on Intelligent Computing and Communication-2019				<b>Springer Nature</b>
2	A machine learning approach for agricultural water management to balance the effect of climate changes	Pradeep H K M. S. Sheshshaye Desai Sujeet	Water Future International Conference 2019				<b>IISc, Bangalore</b>

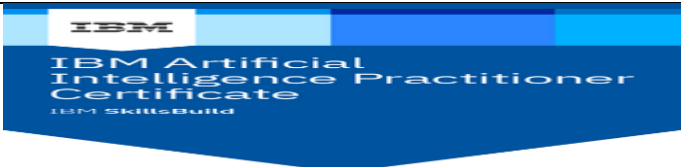
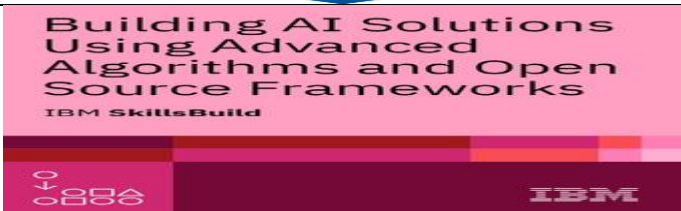



### iii. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Remote Sensing Applications in Agricultural Water Management	IIRS - ISRO, Dept. of Space, Govt. of India, Dehradun, India	3 <sup>rd</sup> to 7 <sup>th</sup> August, 2020.
2	Machine Intelligence & Brain Research	IIT- Madras, India	2 <sup>nd</sup> to 10 <sup>th</sup> January, 2020
3	"Extension Approaches for Water Management"	National Institute of Agriculture Extension Management (MANAGE), Hyderabad, India.	8 <sup>th</sup> to 11 <sup>th</sup> January, 2018
4	Teacher effectiveness: Nurturing your well-being	IIT –Hyderabad, India	1st and 2 <sup>nd</sup> , May, 2015
5	Research methods using structural equation modeling	NIT- Calicut, India	25 <sup>th</sup> and 26 <sup>th</sup> April 2014.
6	Project Management Concepts	Cognizant-Bengaluru, India	April 27 <sup>th</sup> and 28 <sup>th</sup> 2012
7	High impact teaching skills- Mission 10X	Wipro-Bengaluru, India	18 <sup>th</sup> to 22 <sup>nd</sup> April 2011

### iv. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Machine Learning & its Applications	IIT-Roorkee, India	9 <sup>th</sup> to 13 <sup>th</sup> July, 2018

### 9. Details of IBM courses completed

Sl no.	Course title	IBM Certificate courses completed & Badges Earned
1.	IBM Artificial Intelligence Practitioner Certificate	
2.	Building AI Solutions Using Advanced Algorithms and Open Source Frameworks	
3.	Getting Started with Enterprise-grade AI	
4.	Artificial Intelligence Fundamentals	
5.	Getting Started with Enterprise Data Science	

**10. Membership of Professional Bodies:**

**11. Any other information you will like to share about your professional experience**

SI No.	Recognitions	Remarks
1.	One of the Ph.D research work model is certified as Novel and Beneficial by ICAR-IISWC	Certified by ICAR-IISWC, Ministry of Agriculture, Govt. of India, Research Center, Sunabeda, Koraput, Odisha, India, Certificate No.1085/PME/2020
2.	CERTIFICATE OF ACHIEVEMENT from ICAR - IARI for the research work titled "Artificial Intelligence (AI) models to improve productivity of soil & water resources"	Top 300 applicant under Agri India Hackathon, ICAR - IARI, Ministry of Agriculture & Farmers' Welfare, Govt. of India. (Registration ID: 17572054)
3.	Recognized as Reviewer for SCI indexed Elsevier & Springer Journals	Agricultural Water Management, Information Processing in Agriculture, Soft Computing Journal
4.	Invited for special session on "Role of Science Diplomacy in Addressing Global Water Challenges	Organized by Indian Institute of Science, Bengaluru, India.
5.	Joint Publications & Research collaboration with eminent scientists & professors	Dr. M. Madhu, Director & Principal Scientist, ICAR- Indian Institute of Soil & Water Conservation, Dehradun. Dr. Adinarayana Jagarlapudi, Professor, Centre of Studies in Resources Engineering (CSRE), Indian Institute of Technology - Bombay (IITB) , India  Dr. M. S. Sheshshayee, Professor, Department of Crop physiology, University of Agricultural Sciences, GKVK, Bengaluru. Dr. K Rajan, Principal Scientist, ICAR- Indian Institute of Soil & Water Conservation, Ooty. Dr.Sujeeth Desai, Scientist, ICAR - Central Coastal Agricultural Research Institute, Goa.
6.	Recognized as PhD Supervisor	Visvesvaraya Technological University (VTU), Belagavi, Karnataka
7.	Involved in New Curriculum Design	Worked as team member for curriculum design of a new M.Tech program in "Data Sciences". Worked as team member for curriculum design of proposed B.Tech program in "Computer Science and Spatial Analytics"
8.	Recognized as resource person	Contributed as resource person for AICTE-ATAL FDPs in AI & precision agriculture theme
9.	Training Programs Attended in premier organizations & Industry	Attended various training programs on artificial intelligence and other research topics at premier organizations, such as IISc – Bengaluru, IIT- Madras, IIT- Roorkee, IIT- Hyderabad, IIT-Kanpur, IIRS & ISRO – Dheradun, IIIT- Dharwad, NIT- Calicut, NIT- Patna, IIIT- Hyderabad, MANAGE- Hyderabad, Wipro, IBM and Cognizant

**Pradeep H K**  
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