

Dr H S Vijayakumar

Affiliation (Assistant Professor, Dept of...MCA..., SIT)

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Education

	Degree	Year	Institute	Specialization
1	P.hD	2020	VTU, Belgaum	Image processing, Soft Computing,
2	M.Phil	2006	M K U Madurai	Computer Science
3	MCA	1998	Bangalore University	Computer Science
4	B.Sc.	1994	Kuvempu University	Physics, Chemistry, Maths

Professional Experience

	Date (from-to)	Designation	Organization
1	28-01-2008 to till	Assistant Professor	Siddaganga Institute of Technology
2	13-10-2007- 27-01-2008	Sr. Lecturer	Siddaganga Institute of Technology
3	02-11-2000 - 13-10-2007	Lecturer	Siddaganga Institute of Technology,
	1999 - 2000	Lecturer	Siddaganga college for women Dept . of CS, Tumkur

Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

1. NAAC coordinator, Dept of MCA, Siddaganga Institute of Technology, Tumkur.
2. DAAC coordinator, Dept of MCA, Siddaganga Institute of Technology, Tumkur.
3. Internal Auditor
4. Member of Board of Studies and Board of Examination, Dept. of MCA, SIT

5. Academic council member of SIT(2020-22)

Awards and Honors

- Best paper award for the paper entitled “Novel Features for Automated Detection and Assessment of Glaucoma” in 3rd International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques, ICEECCOT 2018 held at Mysore.
- Best paper award for the paper entitled “Grading Severity of Pterygium using Fuzzy Reasoning” IEEE International Conference on Data Science and Information System (ICDSIS) - July -2022 held at MCE Hassan.

Courses Taught

Undergraduate Courses

- Programming in C
- Operating systems
- Software Engineering
- Unix and Shell Programming

Postgraduate Courses

- Programming in C
- Computer Graphics
- Computer Networks
- Human Resource Management
- Software Engineering
- Unix System Programming
- Management and Information System
- System Simulation and Modelling
- User Interface Design
- Introduction to Unix
- Management and Entrepreneurship
- Unix and Shell Programming
- Data Mining & Data Warehousing
- Research Methodology & IPR
- Machine learning
- Operating systems

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
01	Shreedhara N Hegde	Developing innovative and effective Model building with high quality support For agriculture using generative ai	

Research Areas

- Machine Learning
- Soft computing
- Image Processing

Publications

Journals

- H S Vijaya Kumar, M. A. Jayaram “Severity Assessment of Glaucoma using Soft computing Techniques”, NeuroQuantology, Dec-22.
- H S Vijaya Kumar, Priyanka R P “Android Based E-Learning Application design Features for academic and non-academic students” International Journal of Research in Engineering and Science, Volume 9 Issue 7, Year 2021, Pages 7-9
- H S Vijaya Kumar, Deepu N “Fuzzy Inference System Aided Damage Assessment of Pterygium” International Journal of Innovative Research in Computer and Communication Engineering, Volume 9, Issue 4, Year 2021, Pages 3361-3366
- H S Vijaya Kumar, M. A. Jayaram “Detection of Exudates in Retinal Images using back Propagation Neural Network” International Journal of Innovative Research in Computer and Communication Engineering, Volume Volume 8, Issue 5, Year 2020
- H.S Vijaya Kumar, Vikas S.M “ In Container Integration Testing Frame Work” International Journal of Advance Research and Innovation, Volume 6, Year 2018
- H.S Vijaya Kumar, Sanju M Mathew “Leadburg - Mobile Based Behaviour Analysis And Validation System “IJSART, Volume 3 Issue 11, Year 2017

- M. A. Jayaram, H S Vijaya Kumar “Fuzzy inference system aided damage assessment of diabetic maculopathy using retinal images “ Journal of Basic and Applied Research International, Volume 22(2): 70-80, Year 2017
- H S Vijaya Kumar, M. A. Jayaram, Vikas S M “web based digital library management system” International Journal of Modern Trends in Engineering and Research, Volume Volume 04, Issue 2, Year 2017. DOI:10.21884/IJMTER.2017.4054.6MPRL
- H.S Vijaya Kumar M A Jayaram, AshaGowda Karegowda, Bharathi P T “A Comparative Study on Filters with Special Reference to Retinal Images “International Journal of Computer Applications, Volume Volume 138, Year 2016
- Jayaram, M. A.;Vijaya Kumar, H. S.;Chaithanya, D. P “Damage assessment of diabetic maculopathy using retinal images “Indian Journal of Science and Technology, Volume 9, Year 2016. DOI:10.17485/ijst/2016/v9i37/94346 (Web of Science)
- H.S Vijaya Kumar, Bharathi PT, Madhuri R “A Novel Method for Image Analysis and Exudates Detection in Retinal Images “International Journal of Advance Research and Innovation, Volume Volume 4, Issue 1, Year 2016
- H. S. Vijaya Kumar, M. A. Jayaram, Asha Gowda Karegowda “Hard Limiting and Soft Computing Techniques for Detection of Exudates in Retinal Images: A Futuristic Review” British Journal of Applied Science & Technology, Volume 12(6): XX-XX, Year 2015
- H S Vijaya Kumar, M A Jayaram “On applications of Soft Computing Assisted Analysis for Software Reliability” International Journal of Innovative Research in Advanced Engineering, Volume 1 Issue 4, Year 2014, Pages Page32-35,ISSN:2349-2163

Conference Proceedings

- H S Vijaya Kumar , Shreedhara N Hegde “Karnataka Malenadu Region Arecanut Leaf spot Disease Severity Assessment Using Machine Learning”, 3rd International Conference on Smart Systems for applications in Electrical Sciences (ICSSES-2025).
- H S Vijaya Kumar , Rajesh H “ IOT based Smart parking system”, International Conference on Data and Decision Systems (ICDDS-2024)
- H S Vijaya Kumar , “Grading severity of cataract using fuzzy reasoning”, Fourth IEEE International Conference on “Multimedia Processing, Communications and Information Technology” - MPCIT 2024.
- H S Vijaya Kumar , “Comprehensive System for Detection of Pterygium from Healthy Eye “, International Conference on Smart Systems for applications in Electrical Sciences (ICSSES-2024).

- H S Vijaya Kumar , Monika G “Machine learning based model for leaf diseases detection”, International Conference on Smart Systems for applications in Electrical Sciences (ICSSSES-2024).
- H S Vijaya Kumar , Tanushri B R “ML Based Model For Detection of Brain Tumor” 3rd International Conference on Mobile Networks and Wireless Communications (ICMNBC)- 2023.
- H S Vijaya Kumar, M. A. Jayaram “Machine Learning Techniques for Severity Assessment of Pterygium” International Conference on Integrated Intelligence and Communication Systems (ICIICS)- 2023. (Best paper presenter)
- H S Vijaya Kumar, M. A. Jayaram “Comparative study on filters with special reference to Pterygium Images” Fourth International Conference on “Emerging Research in Electronics, Computer Science and Technology”, ICERECT – 2022, December 2022.
- H S Vijaya Kumar, M. A. Jayaram “Grading Severity of Pterygium using Fuzzy Reasoning” IEEE International Conference on Data Science and Information System , Jul-22, 10.1109/ICDSIS55133.2022.9916017. (Awarded Best paper)
- H S Vijaya Kumar, M. A. Jayaram “Novel Features for Automated Detection and Assessment of Glaucoma “3rd International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques, ICECCOT 2018, Year 2018,. (Awarded Best paper)
- H S Vijaya Kumar, M A Jayaram “On Applications of Soft Computing in Network Intrusion Detection and Modeling” National conference on Advances in computer Applications, Year 2012.
- H S Vijaya Kumar, M A Jayaram “Open Source Security: The Pragmatics”, International Conference on Open source Computing, Year 2008

Invited Lectures, talks and workshops

Faculty Development Program

- Emerging Trends in Machine Learning and Deep Learning Techniques
02nd Jan – 06th Jan 23 @ MITS, Madanapalle
- FDP on Entrepreneurship
July – Oct 2023 @ NPTEL- AICTE
- FDP on Enriching Soft Skills and Personality
Feb-April 2023 @ NPTEL- AICTE
- FDP on Introduction to Research
Aug-Oct 2022 @ NPTEL- AICTE
- FDP on Data mining during
Feb-April 2022 @ NPTEL- AICTE

- IoT with Machine Learning 23rd – 27th April 2019 @ Monkfox , bangalore
- Internet of Things 5th – 6th August 2016 @ BITES
- Recent Advancements and Research Directions in Software Engineering
10th – 14th June 2013 @ NITK, Surathkal
- Data Analytics using hadoop 15th Feb 2014 @ SIT, Tumkur
- Machine Learning 15th March 2014 @ BITES
- ISO 9001:2008 Internal Auditors Training Programme 31st July 2014 @ SIT, Tumkur
- Recent Advancements and Research Directions in Software Engineering
10th – 14th June 2013 @ NITK, Surathkal
- Industry oriented software Engineering 6th - 7th Dec 2013 @ SIT, Tumkur
- Software Testing Laboratory 21st – 22nd Jan 2013 @ RNSIT, Bangalore
- Research Methodology and Latex 04th - 5th Feb 2013 @ VTU E-Learning Center Mysore
- Software Testing and Test Automation 09th – 11th Feb 2012 @ MSRIT, Bangalore
- Development of Industry driven and project based curricula in Engineering Technology 20th – 21st Aug 2009 @ NITTTR, Chennai
- ISO9001:2008 QMS 25th –26th Aug, 2009 Quality Management Strategies, @ Bangalore
- Wireless Networks 24th – 25th Oct 2008 @ SSIT, Tumkur
- Essentials of Functional Testing with ibm Rational Robot 26th – 28th June 2006 @ IBM Bangalore
- Communication Skills 01st – 13th Aug 2005 @ Regional Institute of English , Bangalore
- Curriculum Development Workshop on e-Business 01st – 5th April 2002 @ iiit-b
- Introduction to Artificial Neural Networks & its Engineering Applications
27th – 31st Aug 2001 @ IISE, Bangalore