

CURRICULUM VITAE

PERSONAL DETAILS

Name : Dr. Jyothi V K
Father's Name : Keshava Murthy V
▶ Permanent Address : #1349/1, First Main, Krishnamurthy Puram,

Mysore- 570004

➤ Mobile Number : 9481736246

➤ E-mail : jyothivk.mca@gmail.com

> Nationality : Indian

EDUCATION

Ph.D - Doctorate in Computer Science from the University of Mysore under the supervision of Prof. D. S. Guru

Title: ARCHIVAL AND RETRIEVAL OF FLOWER VIDEOS

(An extensive exploration of efficient archival and retrieval algorithms for the recognition and retrieval of videos of different species of flowers)

MCA - Master of Computer Applications from Visvesvaraya Technological University, Belgaum. Secured first class with distinction

B. Sc - Bachelor of Science in Statistics, Mathematics and Computer Science from the **University of Mysore.** Secured **distinction**

KSET - Qualified in Karnataka State Eligibility Test for Assistant Professors.

PROFESSIONAL EXPERIENCE

- Worked as a Lecturer at Vidya Vikas Educational Trust, Mysore from 2012-2013
- Working as a **senior researcher** and guest lecture at Department of Studies in Computer Science, Manasagangotri, University of Mysore, Mysore from 2014 to till date.

AWARDS/RECOGNITION

- **First topper** of the college in MCA
- Awarded as **star performer** of the college in MCA
- Member, Board of Studies in Computer Science, Maharani's Science College for Women, Mysore for the period of 2019-2021.
- Best paper award in the International Conference on Evolutionary Computing and Mobile Sustainable Networks (ICECMSN 2020), Sir M. Visvesvaraya Institute of Technology, Bangalore, Feb. 20-21, 20202.
- **Appreciation** in conduction and organization of various activities in the section of Information and Communication Science and technology (including computer science) during 103rd Indian Science Congress, 2016 held at University of Mysore from 3rd to 7th January 2016.

TECHNICAL SKILLS

- Programming Languages: C, C++, JAVA, .NET, MATLAB, Python.
- Subjects: Data Structures, Design and Analysis of Algorithms, Data Base Management System, Software Engineering, Image Processing, Pattern Recognition, Machine Learning.

PROJECTS SUPERVISOR

- Develop new machine learning models to classify healthy/diseased drosophila flies in videos by detection and tracking of drosophila motion estimation
- Develop machine learning model for gender identification of drosophila flies in mages for the detection of diseases
- Develop machine learning model for the detection and tracking of flowers in videos

- Develop an android application using machine learning for identification of flowers in images captured via android mobile
- Develop new machine learning models to detect leaf diseases.
- Design and develop deep learning model for the detection and recognition of vehicle number automatically
- Develop machine learning model to retrieve videos based on contents of the video using fuzzy logic
- Develop machine leaning model for the detection and recognition of fruit plants
- Develop machine leaning model for the detection and recognition of flower plants

RESEARCH PUBLICATIONS

- ➤ D. S. Guru, V. K. Jyothi, Y. H. Sharath Kumar, 2017, Cluster Based Approaches for Keyframe Selection in Natural Flower Videos, ISDA 2017, **Springer International Publishing**, AISC:736, **Book Chapter**, pp. 474-484.
- D. S. Guru, V. K. Jyothi, Y. H. Sharath Kumar, 2018, Features Fusion for Retrieval of Flower Videos, Proceedings of DAL 2018, **Springer Lecture notes in Network Systems** 43, pp.221-234.
- V. K. Jyothi, D. S. Guru, Y. H. Sharath Kumar, 2018, Deep Learning for Retrieval of Natural Flower Videos, **Elsevier Procedia Computer Science**:132, pp.1533-1542.
- ➤ V. K. Jyothi, D. S. Guru, Y. H. Sharath Kumar, 2018, Classification of natural flower videos through sequential keyframe selection using SIFT and DCNN, rtip2r2018, Communications in Computer and Information Science (CCIS), Springer.
- > Jyothi V K, D S Guru, N Vinay Kumar, V. N Manjunath Aradhya, Retrieval of videos of flowers using deep features, International Conference on Evolutionary Computing and Mobile Sustainable Networks (ICECMSN 2020), Springer.
- ➤ Jyothi V K, V N Manjunath Aradhya, Sharath Kumar Y H, and D S Guru, Indexing Multiple Descriptors in Retrieval of Flower Videos, **Multimedia Tools and Applications Journal** (Communicated), 2019.
- ➤ Jyothi V K, V. N. Manjunath Aradhya, Sharath Kumar Y H, and D S Guru, Retrieval of flower videos based on a query with multiple species of flowers, **Artificial Intelligence in Agriculture Journal**, 2020, (Communicated).
- Jyothi V K, V. N. Manjunath Aradhya, Sharath Kumar Y H, D S Guru and N Vinay Kumar, Deep Flower: A Video Retrieval System, Engineering Applications of Artificial Intelligence Journal, 2020. (Communicated)
- ➤ K N Chaitra, Jyothi V K, M Chandrajith, D S Guru, Flower classification in Videos: A HOG-PCA-NN Method, 5th IAPR international conference on **computer vision & image processing** (Communicated).
- Emmanual Ndagijimana, Jyothi V K, D S Guru, Chandrashekara K T, Detection, Tracking, and Classification of Drosophila Flies in Videos (under review).

PARTICIPATION IN CONFERENCE/WORKSHOPS/SEMINARS

- ➤ One-Day Intel HPC code modernization (Parallelization) workshop, High Performance Computing Center, Dept. of Studies in Computer Science, Manasagangotri, University of Mysore, July-7, 2015.
- ➤ One-Day State Level Seminar on Multimedia Information System, MMK & SDM Mahila Maha Vidyalaya, Mysore, Oct.1, 2015.
- Workshop on Digital Image processing: Basics to Recent Trends, Dept of Computer Science and Engineering, Sri Jayachamarajendra College of Engineering, Mysore, June 13-17, 2016.
- Workshop on Statistics and Probability, Maharaja Institute of Technology, Mysore, Oct. 15-16, 2016.
- ➤ Attended 20+ seminars/workshops/conference