

Dr. Mahantesh K

Designation: Associate Professor

Qualification:

- Ph.D. Computer Science & Engineering, Visvesvaraya Technological University.
- M. Tech, SJCE, Visvesvaraya Technological University.
- BE, BIET, Davangere, Visvesvaraya Technological University.

Experience:

- Associate Professor, Dept. of CSE (Data Science), RNS Institute of Technology, Bengaluru (Sep 2024 Till date)
- Associate Professor, Dept. of ECE, SJB Institute of Technology, Bengaluru (July 2007 August 2024).

Courses Taught:

Natural Language Processing, Pattern Classification, Computer Vision, Computer Networks, Multimedia Communications, Artificial Neural Networks, Python Application Programming, Linear Algebra, Digital Image Processing, Programming in Java, Machine Learning using Python, DevOps.

Areas of Research:

Brain-Machine Interfaces, Image/Video/Signal Processing, Artificial Intelligence & Machine Learning, Computer Vision & Pattern Recognition.

Research Grants & Funds:

- Received funds from Vision Group on Science and Technology, Principal Investigator of project entitled "Brain Computer Interface and Computational Neuroscience Lab", K-FIST L1, VRN/001815/20-21, 15 lakhs.
- Received financial assistance for student project proposals under KSCST & VTU.

Certifications and Achievements:

- Senior Member IEEE & Treasurer IEEE ITS-Bangalore chapter.
- Supervised & Awarded 4 Ph.D.'s under Visvesvaraya Technological University.
- Recognized resource person various state and central government sponsored STTPs, workshops & FDP's.
- Program Coordinator & Resource Person FDP's in association with Electronics & ICT Academy, NIT Warangal, MeitY GoI Sponsored.
- Best paper awards, IEEE International Conferences.
- Best Project of the Year award, Seminar and Exhibition held at VTU Belagavi, DST (GoI) and KSCST (IISC Bangalore).
- Achieved 73% Elite score in NPTEL's "Digital Image Processing" and 88% in "Python towards Data Science."
- 1st Runner-up -National level Rapid Prototyping Camp (RPC 2024), organised by Edulateral Higher Educational Challenge.
- Best Project 3rd prize award, JVTM 2023 National level Project Exhibition held at ACU.
- Outstanding Reviewer Award, International Conference on Artificial Intelligence and Data Engineering, Springer, NMAMIT, Nitte.



Patents published:

- Visual Stimuli Classification using EEG Signals for Efficient Human Computer Interaction, Patent No. 202441054059 A, 02 Aug 2024.
- An AI Enabled Prosthetic Arm for Rehabilitation and Advanced Arm Dynamics, Patent No. 202241045887, CBR No. 31995, 11th Aug 2022.
- Control Devices using Brain Machine Interface, Patent No. 202141036353, Aug 2021.

Conferences & Symposiums Organized:

- Session Track Co-Chair (IEEE ITS) IEEE CONECCT, Information Theory for AI, Big Data, and Emerging Technologies, 10th-13th July, 2025.
- Conference Organizing Chair & Publication Co-Chair IEEE 2nd International Conference on Distributed Computing and Optimization Techniques, S.J.B Institute of Technology during 15th & 16th March 2024.
- Conference Operations Chair & Publication Co-Chair Springer 1st International Conference on Distributed Computing and Optimization Techniques, May 2021.
- Conference Operations Chair IEEE International Conference on Recent Advances in Electronics and Communication Technology, 16 17 March 2017.
- Symposium chair International Symposium on Computer Vision & Pattern Recognition, IEEE IC3I, AMITY university, Noida, Delhi, 14 17 December 2016.

Major Projects (Recognized and funded by KSCST & VTU):

- CIReS: Content based Image Retrieval System Inspired by Deep Learning and Computer Vision Techniques.
- Neuro-Vision: Deep Learning and BCI for AI enabled Assistive Devices.
- IoT Based Solutions for Health Care: Moving AI to the Edge.
- Intelligent Device Control Using Brain Machine Interface.
- TERS: Text Extraction & Recognition System from Natural Scene Images.
- Convolutional Neural Network-based Visual Stimuli Classification using EEG Signals for Efficient Human-Computer Interaction.
- A Heuristic Framework for Secured IOT in Distributed Systems.
- Classification of Epilepsy in EEG Signals using Machine Learning Techniques.
- Design and Development of BCI Model to assist Aged or Physically Challenged People.
- An efficient Motor imagery classification technique for BCI Applications.
- Activity Recognition using Deep Learning Techniques.
- An Automated Human Activity Recognition in Video Surveillance System.

Key Publications:

- Google scholar: <u>https://scholar.google.co.in/citations?user=OSWU-iwAAAAJ&hl=en</u>
- Orcid: <u>https://orcid.org/0000-0003-1257-053X</u>
- Scopus: https://www.scopus.com/authid/detail.uri?authorId=56491220500
- Web of Science: <u>https://www.webofscience.com/wos/author/record/O-9299-2019</u>

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