

# PROFILE

**Name:** Dr. H S Mohana

**Designation:** Principal  
Professor & Head

**Qualification:** B.E., M.E., Ph.D.,

**Affiliation:** FIE, FIETE, MISTE, IACSIT-Singapore

**Specialization:** Digital Image Processing and Pattern Recognition

**Experience:** 32 Years

**FDPs/ Conferences/ Workshops/ Seminars Conducted/Co-ordinated:** 07

**FDPs/ Conferences/ Workshops/ Seminars Attended:** 33

**NPTEL Certifications:** 02

**Publications:**

- a. National and International Conferences: 32
- b. National and International Journals: 28
- c. Books – Written, Reviewed, Chapters Written: 07

**Areas of Interest:** Computer Vision, Digital Image Processing and Pattern Recognition

**Research Guidance:**

- a. Ph.D.: 02 Completed, presently guiding 05 Candidates.
- b. M. Sc. Engineering by Research: 1 Completed

**E-Mail Id:**[mohanahs@rediffmail.com](mailto:mohanahs@rediffmail.com), [drhsmohana@gmail.com](mailto:drhsmohana@gmail.com)

**FDPs/ Workshops/ Conferences/ Seminars Conducted/coordinated**

1. **Coordinated: SDP- One-day workshop on PYTHON FOR ALL** on 11-01-2021.  
The programme was arranged for all the students of department of Electronics and Communication Engineering, NCEH. Organised by IEEE Student Branch, in association with IEEE Bangalore section and IEEE Mysore section.
2. **Recognised as resource person:** AICTE, Training and Learning(ATAL) Academy Sponsored Faculty Development Programme on **Biomedical Instrumentations: Innovation, Advances and Challenggers** 07-11 December 2020. Organised by Department of Electronic and Instrumentation Engineering University of BDT college of Engineering , Davangere, Karnataka.



3. **Recognised as resource person:** AICTE, Training and Learning(ATAL) Academy Sponsored Faculty Development Programme on **Artificial Intelligence and Machine Learning Applications in Biomedical Engineering** 21-25 September 2020. Organised by Department of Electronic and Instrumentation Engineering University of BDT college of Engineering , Davangere, Karnataka.
4. TEQIP-II Sponsored one week FDP/workshop on **Digital Signal and Image Processing for Biomedical Applications**, for the faculty and students on 20<sup>th</sup> and 24<sup>th</sup> March, 2017 at MCE, Hassan.
5. TEQIP-II Sponsored Two Days Hands-on Training programme on **Real Time Integration and Implementation of Sensors**, for the faculty and students on 20<sup>th</sup> and 21<sup>st</sup> February, 2017 at MCE, Hassan.
6. Hands-on Workshop on **Embedded System Design using Intel and ARM Cores**, 27<sup>th</sup> & 28<sup>th</sup> of February 2016.
7. Workshop on **Antenna Research and Communication Technology** Jointly organized by Departments of EIE and ECE held on 6<sup>th</sup> and 7<sup>th</sup> March, 2015, at MCE, Hassan.

#### **FDPs/ Workshops/ Conferences/ Seminars Attended**

1. **Faculty Development Programme on Concepts, Methods, Challenges and Future Directions in Medical image analysis using Machine Learning**, Organized by Department of Electronic and Instrumentation Engineering, *SJCE , JSSS&TU*, Mysuru 10-14 August 2020
2. Participated in a Webinar on **IMAGE FUSION – Application and Research Avenues** organised by Department of Computer Science and Engineering, NCEH on 3<sup>rd</sup> August 2020.
3. TEQIP II sponsored One week FDP on **End to End Innovations** organized by TATA Centre, IITB, Mumbai from 7<sup>th</sup> to 11<sup>th</sup> March, 2017.
4. TEQIP-II Sponsored Two Days Hands-on Training Programme on **Real Time Integration and Implementation of Sensors** for the faculty and students on 20<sup>th</sup> and 21<sup>st</sup> February, 2017 at MCE, Hassan.
5. Workshop on **Quality initiatives in Technical & Higher Educational institutions through accreditation & assessment**, held at GEC Hassan On 5-7 November-2015.
6. TEQIP-II workshop **Recent Technological in Optical Engineering**, organized by Department of E & C Engg. on 14-18 July- 2015 held at MCE, Hassan.
7. Workshop **Technical Document Type stting with LATEX**, organized by Department of E & I Engg. on 19<sup>th</sup> March 2015 held at MCE, Hassan.
8. Workshop on **Antenna Research and Communication Technology** Jointly organized by Departments of EIE and ECE held on 6<sup>th</sup> and 7<sup>th</sup> March, 2015, at MCE, Hassan.
9. Workshop **Embedded System design using Nuvotron 52 Microcontroller**, organized by Department of E & I Engg. on 27<sup>th</sup> Feb- 1<sup>st</sup> March 2015 held at MCE, Hassan.
10. **World Summit on Accreditation**, from 8<sup>th</sup>–10<sup>th</sup> March 2014, held at New Delhi.

11. National workshop on **Patents & Innovations**, held at MCE, Hassan on 31<sup>st</sup> August 2013 - Organizing Committee member and participant
12. **Indian Technology Congress, 2013**, 24<sup>th</sup>–25<sup>th</sup> July 2013, Bengaluru.
13. Workshop on **Deriving Program Educational Objectives/Program Outcomes/Course Outcomes/Assessments for NBA Self-Assessment Report**, held at MCE Hassan from 11-13<sup>th</sup> July 2013.
14. Workshop **Strengthening Academic Leadership Traits and Good Governance**, organized by Cresys Technologies from 27<sup>th</sup>–28<sup>th</sup> June 2013 held at Bengaluru.
15. Workshop **Mind Ur Mind**, organized by Sellmark Inc. on 23<sup>rd</sup> March 2013 held at Hotel Southern Star, Hassan.
16. Workshop on **Micro and Smart Tech**, MSRIT, Bangalore, 2<sup>nd</sup> and 3<sup>rd</sup> July 2009
17. Workshop on **Research Methodologies**, MSRIT, Bangalore, 28<sup>th</sup> to 29<sup>th</sup> May 2009,
18. Workshop on **Micro and Smart Technology**, IISc, Bangalore, 21 February 2009
19. Workshop on **Bringing Industry to Institutions**, MCE, Hassan, 19-02-2009 to 21-02-2009
20. **FDP Mission 10X** by Wipro, 11<sup>th</sup>-15<sup>th</sup> November 2008, MCE, Hassan
21. Workshop on Multi-sensors and data fusion, 27<sup>th</sup>-28<sup>th</sup> Dec 2007, MSRIT, Bangalore.
22. Workshop on **Digital Image Processing and Computer Vision**, on 4<sup>th</sup> and 5<sup>th</sup> May 2007, at MCE, Hassan.
23. Workshop on **Value inculcation in engineering education**, 30<sup>th</sup> April and 1<sup>st</sup> May 2007, MCE, Hassan.
24. Workshop on **Student Evaluation Methods in Autonomous Institutions** 9<sup>th</sup> and 10<sup>th</sup> Feb. 2007, MCE, Hassan.
25. **FDP Blue Print for Success**, 27<sup>th</sup>-29<sup>th</sup> Dec 2006, by Qualified Learning Systems Co. INC. (USA) (Shiv Khera), MSRIT, Bengaluru
26. **ISTE 36<sup>th</sup> Annual Convention and National Seminar**, 14<sup>th</sup> -16<sup>th</sup> Dec, 2006, Bannari Amman Institute of Technology, Satyamangalam, Tamilnadu.
27. Workshop on **Emerging Trends in Control and Instrumentation**, 1<sup>st</sup> and 2<sup>nd</sup> September 2006, MCE, Hassan.
28. Workshop on **Mathematical Tools for Engineering Analysis**, 10<sup>th</sup> -12<sup>th</sup> March 2006
29. **FDP FEEL Teacher Development Programme**, 27<sup>th</sup>-31<sup>st</sup> Aug 2005, by CLHRD, Mangalore MCE, Hassan.
30. Fifth national workshop on **cryptology**, 12<sup>th</sup> -14<sup>th</sup> Aug.2005, JNNCE, Shivamogga with DRDO and CSIR.
31. International conference on **Human machine Interface**, 20<sup>th</sup>-23<sup>rd</sup> December 2004, IISc, Bengaluru.
32. KSCST Seminar, 18-20 September 2002, SIT, Tumakuru
33. KSCST Seminar, KVGCE, Sullia, 2000.

## Patent Publications:

**1.Title of Invention:** IOT and Power system-based energy harvesting technique for railway sector by using WSN and ZIGBEE

**Application number:** 202241028352

**Publication date :** 27/05/2022

<http://ipindia.nic.in>

**2. Title of Invention:** Data Science, AI, ML algorithms Based Paddy-Disease Avoidance system using DNN and Image Processing approach

**Application number:** 202241037444

**Publication date :** 08/07/2022

<http://ipindia.nic.in>

## List of Publications:

### National Conferences:

1. H S Mohana<sup>1</sup>, Dr. G Shivakumar<sup>2</sup>, Shreedevi K<sup>3</sup>, Aditiya M Puranik<sup>4</sup>, **Human Action Classification Using Differential Technique** National conference CCSO17 held at Dr. AIT Bangalore, during 30<sup>th</sup> -31<sup>st</sup> March-2017 (NC19)
2. G. Shivakumar, H. S. Mohana, H. S. Murali and C. M. Naveen Kumar, **Lab VIEW Based Specific Gravity Measurement**, National Conference on Power Systems and Industrial Automation (NCPSIA-2015), pp 84-88, GSSSIETW, Mysore 22<sup>nd</sup> August 2015. (NC18)
3. U Mahanthesh, R Avi kumar Dr. M Shivakumar Dr. H. S. Mohana, **Real Time Controlling of Autonomous Robot based on the Detection of Traffic Signs using MATLAB**, National Conference on Power Systems & Industrial Automation (NCPSIA-2015), GSSS Institute of Engineering & Technology for Women, Mysore (NC17)
4. Dr. H.S. Mohana, G. Shivakumar, B K Rajithkuma, C. M. Naveen Kumar, **Era Identification and Recognition of Stone In-scripted Kannada Characters Using Artificial Neural Networks**, 2<sup>nd</sup> National Conference on Innovation in Computing and Communication Technology (NCICCT '14), March 22, 2014. Department of CSE, Kongunadu College of Engineering and Technology-Trichy, Tamilnadu, India. (NC16)
5. Dr. H. S. Mohana, G. Shivakumar, and H.S. Prabhakara, **Engineering and Technology Education for Sustainable Development**, presented at Indian Sustainability Congress-2014 held on 4-5 March 2014 at Bangalore. (NC15)
6. H. S. Mohana, M. Ashwathakumar, G. Shivakumr, **Real Time Dynamic Scene Analysis Using Differential Technique and Performance Evaluation with Optical Flow**, IEEE- Int. National conference (ICACC-09) at Singapore, 21 – 24 January 2009 (NC14)
7. H. S. Mohana, M. Ashwathakumar, G. Shivakumr, **Vehicle Detection Counting by Using Real Time Traffic Flux Through Differential Technique and Performance Evaluation**, IEEE-International Conference (ICACC-09) at Singapore, 21 – 24 January 2009 (NC13)

8. G. Shivakumar, H. S. Mohana and P. A. Vijaya, **Human Blood Glucose Measurement Using PIC 16F877 Microcontroller**, National symposium on Instrumentation, paper number-CP-327, Institute of Technology & Management, Department of Electronics & Instrumentation, ITM Universe, Gwalior, 12th to 15th October 2006 organized by Instrument Society of India, Indian Institute of Science, Bangalore. (NC12)
9. H. S. Mohana, M. Ashwathakumar, G. Shivakumr, K C Ravishankar, **Vehicle Tracking and Velocity Estimation using Cumulative Optical Flow Computation**, NCICT-2006 at PSG-Coimbatore on 7<sup>th</sup> and 8<sup>th</sup> of 2006. (NC11)
10. H. S. Mohana, G. Shivakumar, **A Bio-Veterinary System to Characterize Disease in Bovines**, presented at National symposium on Instrumentation held at Cochin University of Science and Technology, Cochin, during 30<sup>th</sup> November to 2<sup>nd</sup> December 2005, organized by Instrumentation Society of India. Indian institute of Science, Bangalore. (NC10)
11. G. Shivakumar, H. S. Mohana, **Medical Strip Detection and Diverting System Using PIC16F877 Microcontroller**, presented at National symposium on Instrumentation held at Cochin University of Science and Technology, Cochin, during 30<sup>th</sup> November - 2<sup>nd</sup> December 2005, organized by Instrumentation Society of India, Indian Institute of Science, Bangalore. (NC9)
12. Paniraj K M, Ravishankar K C, Mohana H S, Prabhakara H S, **Genetic Algorithm Based Lossless Image Compression**, National Conference at JNNCE Shivamogga. Malnad College of Engineering, Hassan, Karnataka, India -2005 (NC8)
13. G. Shivakumar, H S Mohana and H.N Suresh, **Trellis Codec using Altera Max 3000 CPLD**, National Conference on Control and Instrumentation held at MIT, Manipal, from 05<sup>th</sup>–06<sup>th</sup> November 2004. (NC7)
14. Dr. H N Suresh, G. Shivakumar, H S Mohana and Dr. M S Raviprakash, **Design and Fabrication of Switched Mode Power Supply**, National Conference on Recent Advances in Power System and Control. Held at GVP, Vizag, from 27<sup>th</sup> – 29<sup>th</sup> December 2003. (NC6)
15. Moushumi Mazumdar, G Shivakumar, H S Mohana and Dr. K A Krishnamurthy, **An Automated Terrace Cultivation System with Remote Monitoring Facility**, National symposium on Instrumentation. Held at GB Pant University, from 3<sup>rd</sup>-5<sup>th</sup> November 2003. (NC5)
16. Anirban Bhowal, G. Shivakumar, H. S. Mohana and Dr. K. A. Krishnamurthy, **A PIC 16F877 Microcontroller Based Automation of Cattle Feed Plant**, presented at the National Symposium on Instrumentation. Held at GB Pant University, from 3<sup>rd</sup>-5<sup>th</sup> November 2003. (NC4)
17. H S Mohana, Dr. K A Krishnamurthy & Dr.M S Raviprakash, **Impact of Globalization on Quality of Technical Education**, presented at 32<sup>nd</sup> Annual Convention and National Seminar of ISTE 27<sup>th</sup> - 29<sup>th</sup> December 2002, NMAMIT, Nitte Karnataka. (NC3)
18. H S Mohana, Dr. K A Krishnamurthy & Dr. M S Raviprakash, **Society and Higher Education**, presented at 32<sup>nd</sup> Annual Convention and National Seminar of ISTE 27<sup>th</sup>- 29<sup>th</sup> December 2002, NMAMIT, Nitte Karnataka. (NC2)
19. H S Mohana, Dr. K A Krishnamurthy, **A Novel Sensor for Microprocessor based Drip Irrigation System**, presented at IETE National conference on sensors and transducers held at CSIO, Chandigarh during 20-21-September 1996. (NC1)

### International Conferences:

1. H. S. Mohana and U. Mahanthesha “**Smart Digital Monitoring for Attendance System**”, International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering – (ICRIEECE), June,2020 (IC13)
2. Dr, Mohana H S, Rajithkumar B K, Uday J, published research paper titled **Drainage Overflow detection**, International Conference on Recent Trends in Science & Technology (ICRTST - 2020). (IC12)
3. Manjunatha KC, H.S. Mohana " **Implementation Of Computer Vision Based Industrial Automation Systems And Performance Evaluation**", Proceedings of ieeeforum International Conference, 17th December, 2017, New Delhi, India (IC11)
4. G. Shivakumar, Dr. H. S. Mohana, H Y Swathi, **Crowd Behaviour Analysis: A Survey**, 2017 International Conference on Recent Advances in Electronics and Communication Technology. (IC10)
5. K.C Manjunatha, H. S Mohana, P. A. Vijaya, **Implementation of Computer Vision Based Industrial Automation by Using Neuro-Fuzzy Algorithms**, IEEE International Conference on Intelligent and Autonomous Systems (ICIAS2015) at MCE Hassan & MCF (ISRO), India, pp-19, 2015. (IC9)
6. Pramod Kammar, H S Mohana, T D Vishnumurthy **Minimization of Ring Artifacts in CT Images**, ICCSEEE-2015, Bengaluru, 24<sup>th</sup> & 25<sup>th</sup> May 2015. (IC8)
7. H. S. Mohana and B K Rajithkumar, **Era Identification and Recognition of Ganga and Hoysala Phase Kannada Stone Inscriptions Characters using Advance Recognition Algorithm**, 978-4799-4190-2/14/\$31.00 ©2014 IEEE 2014. Page number 711-717 (IC6)
8. Dr. H. S. Mohana, Navya.K, B K Rajithkumar, C Nagesh, **Interactive Segmentation for Character Extraction in Stone Inscriptions**, Proceedings of IEEE sponsored conference - International Conference on Current trends in Engineering and Technology in Coimbatore, paper id. ICCTET 077, pp-431-438. (IC7)
9. H. S. Mohana, M. Ashwathakumar, G. Shivakumr, H. S.Murali, **Real Time Parameter Evaluation Algorithm for ECG Signal**, International conference on signal and image processing, VVIET, Mysore,12-14 Agust,2009. (IC5)
10. H. S. Mohana, M. Ashwathakumar, G. Shivakumr, K. C. Manjunath, **Detection and Classification of Moving Objects by Using Real Time Traffic Flux Through Differential and Graphical Analysis**, IEEE- 2009 First International Conference on Computational Intelligence, Communication Systems and Networks, Indore, 22-24<sup>th</sup> July 2009 (IC4)
11. H.S. Mohana, M. Ashwathakumar, G. Shivakumr, **Statistical Approach to Real-time Traffic Flux Estimation**, IEEE International Conference on Digital Signal and Image Processing, 7<sup>th</sup> to 9<sup>th</sup> Dec, 2006, BVB College of Engineering, HUBLI (Page no. 501-505). (IC3)
12. G. Shivakumar., H.S. Mohana and Dr. H.N. Suresh, **PLC for Captive Power Generation Using Altera MAX 3000 CPLD**, International Conference on Energy,

information technology and power to be held at GIET, Poona, from 28<sup>th</sup> –29<sup>st</sup> January 2005 (IC2)

13. K. V. Siddamal, G. Shivakumar, H. S. Mohana and M. V. Sathyanarayana, **Design and Development of Thin Film Magnetoresistive Magnetometer**, presented and published at the International Conference on Instrumentation to be held at GIET, Poona, from 19<sup>th</sup> –21<sup>st</sup> December 2004. (IC1)

#### **International Journals:**

1. Journal Of Electronics Information Technology Science And Management, “**Face and Fingerprint Based Smart Digital voting Mechanism using Data Fusion and ML Algorithm**”, Volume 12, issue 12, December 2022, ISSN NO: 0258-7982, PaperID: JEITSM/1596, DOI:10.37896/JEISMV12.12/221
2. Published a paper titled “**Impact of Truncation & Aliasing Artifacts in Detection of Cerebellar Lesion from MRI images**”, in International Journal of Advance Research and Innovative Ideas Volume-8 Issue-1 2022
3. “**Transvaluate of machine learning algorithms in dissecting of Cerebrum tumor in MR images**”, in International Journal of Advanced Research in Engineering and Technology (IJARET), Volume 12, issue 7, July 2021, pp-38-45, Article ID: IJARET\_12\_07\_004, ISSN Print: 0976-6480 and ISSN online: 0976-6499. Scopus Indexed Journal. <https://doi.org/10.34218/IJARET.12.7.2021.004>
4. Dr.H.S.Mohana, Rajith Kumar BK, Dr.B.V.Uma. Dr.Shilpa D R, published research paper titled **Development of Low Cost System for Estimating RBC, WBC Count Using Image Processing** IGI Global USA “International Journal of Organizational and Collective Intelligence Volume 11, Issue 1, January-March 2021. Indexing in Scopus, IET inspec, ACM Digital library, DBLP,) (IJ27)
5. Dr. H S Mohana and Mr. Mahanthesha U, published a research paper titled “**HUMAN ACTION RECOGNITION USING STIP EVALUATION TECHNIQUES**” in Progress in Advanced Computing and Intelligent Engineering. Advances in Intelligent Systems and Computing, vol 1198. Springer, Singapore. [https://doi.org/10.1007/978-981-15-6584-7\\_38](https://doi.org/10.1007/978-981-15-6584-7_38), Print ISBN :978-981-15-6583-0, Online ISBN: 978-981-15-6584-7, 30 October 2020. (IJ26)
6. Dr. H S Mohana and Mr. Mahanthesha U, published a research paper titled “**HUMAN ACTION RECOGNITION USING STIP TECHNIQUES**” in International Journal of Innovative Technology and Exploring Engineering (IJITEE), Scopus Indexed Journal ISSN: 2278-3075, Volume-9 Issue-7, May 2020. (IJ25)
7. Dr. H S Mohana and Mr.Mahanthesh U, published research paper titled “**SMART DIGITAL MONITORING FOR ATTENDANCE SYSTEM**” in IEEE Xplore, DOI: 10.1109/ICRIEECE44171.2018.9009166, 27 February 2020. (IJ24)
8. H S Mohana, Prathibha G “ **Quantitative and Qualitative Measurement of K-Means and Fuzzy C Means, the Detection and Extraction of MRI Cerebellum lesions**”, International Journal of Recent Technology and Engineering(IJRTE), ISSN:2277-3878, Volume-8 Issue -3, September 2019 (IJ23), DOI: 10.35940/ijrte.C5291.098319

9. Dr. H.S. Mohana, Rajithkumar B K "**Edge Detection of Degraded Stone Inscription Kannada Characters Using Fuzzy Logic Algorithm.**" Data Engineering and Intelligent Computing. Springer, Singapore, 2018. 11-20. (IJ22)
10. T D Vishnumurthy, Dr. H S Mohana, Vaibhav A Meshram, **Detection and classification of Abnormalities in Brain M R Images using Support Vector Machine with Different Kernels**, International Journal of Electronics Engineers (ISSN(O)2321-2055ISSN(P) 2321-2047, Vol.09, Issue01, Jan-Jun 2017 (IJ21)
11. T D Vishnumurthy, Dr. H S Mohana, Vaibhav A Meshram, Pramod Kammar, **A Novel Algorithm for Removal of Herringbone Artifact in Brain MR Images Using FFT and Canny Edge Detector**, American Journal of Engineering Research (AJER), e-ISSN: 2320-0847 p-ISSN: 2320-0936, Volume-5, Issue-5, pp-184-189. (IJ20)
12. H. S. Mohana, B. K. Rajith Kumar, J. Uday and B.V. Uma, **Edge Detection of Degraded Stone Inscription Kannada Characters Using Fuzzy Logic Algorithm**, Data Engineering and Intelligent Computing Proceedings of IC3T 2016-Springer. (IJ19)
13. T D Vishnumurthy, Dr. H S Mohana, Vaibhav A Meshram, Pramod Kammar, **A Novel Algorithm for Removal of Herringbone Artifact in Brain MR Images Using FFT and Canny Edge Detector**, American Journal of Engineering Research (AJER), e-ISSN: 2320-0847 p-ISSN : 2320-0936, Volume-5, Issue-5, pp-184-189.(2016) (IJ18)
14. H.S. Mohana <sup>1</sup>, B K Rajithkumar <sup>2</sup>,**Real Time Kannada Stone Inscriptions Characters Recognition System**, International Journal of Electrical, Electronics and Communication Engineering Volume 1 Issue 1-pp1-11-2016 (IJ17)
15. U Mahanthesh [2], Dr. H S Mohana, **Identification of Human Facial Expression Signal Classification Using Spatial Temporal Algorithm**, International Journal of Engineering Research in Electrical and Electronic Engineering (IJEREEE) Vol 2, Issue 5, May -2016 (IJ16)
16. R Pradeepa, Dr. H S Mohana, **Historical Ganga and Ashoka Character Recognition and Classification with the help of SVM Model**, IRJET, Vol.2 Issue 2, Jun 2015. (IJ15)
17. R Pradeepa, Dr. H S Mohana, **Segmentation of Historical Documents Using Region Based Segmentation Method**, IRJET, Vol.2 Issue 2, May 2015. (IJ14)



18. R Pradeepa, Dr. H S Mohana, **Identification And Recognition of Stone In-Scripted Hoysala Characters using SVM Model** , IJIRT, Vol 1, Issue 12, May 2015. (IJ13)
19. H.S. Mohana, Navya.K, G. Shivakumar, Dr. P. C. Srikanth, **Stone Inscripted Kannada Characters Matching using SIFT**, International Journal of Industrial Electronics and Electrical Engineering, ISSN: 2347-6982, Volume-2, Issue-6, June-2014. (IJ12)
20. H. S. Mohana, B K Rajithkumar, Dr. B. R. Sujatha, M B Bhavana, **Extraction of Stone In-scripted Kannada Characters Using Sift Algorithm Based Image Mosaic**, International Journal of Electronics & Communication Technology, IJECT Vol. 5, Issue 2, April - June 2014 (IJ11)
21. B K Rajithkumar, Dr. H.S. Mohana, Dr. M .Shivakumar, Dr. K. C. Ravishankar, **Template Matching Method for Recognition of Stone Inscripted Kannada Characters of Different Time Frames based on Correlation Analysis**, International Journal of Computer and Electronics Research(IJCER) [Volume 3, Issue 3, June 2014 (IJ10)
22. H. S. Mohana, Rajithkumar B K, Navya.K, H. S.Prabhakara, G. Shivakumar, **Finger Print Recognition using Scale Invariant Feature Transform**, International Journal of Electrical and Electronic Engineering & Telecommunications (IJEETC), Volume 3, Issue 3, May 2014. (IJ9)
23. K Navya, Dr. H. S. Mohana, C Nagesh, Chaithra Vijayaprakash, **A Simple Iris Detection Algorithm Based on the Cross-Correlation and Feature Transform Matching Method**, International Journal of Electronics and Communication Technology, ISSN: 2230-9543, Volume-5, Issue-2, April-June-2014. (IJ8)
24. Kiran, H S Mohana, P A Vijaya, **Human Machine Interface based on Eye Wink Detection**, International Journal of Informatics and Communication Technology, Vol 2, No.2, July 2013, PP.116-123, ISSN: 2252-8776 (IJ7)
25. H S Mohana, S Nandini, **Development and Simulation of Poly View Fusion for Enhance Video Denoising Algorithms**, IJRIT International Journal of Research in Information Technology, Vol 1, Issue 5, May 2013, Page.165-174 (IJ6)
26. H.S. Mohana, M. Ashwathakumar, K C Manjunatha, **Object Classification from Estimated Traffic Flux Density Using Discrete Fourier Transform**, International Journal of Computer Science and Artificial Intelligence, March 2013, Vol 3, Issue 1 (IJ5)
27. K C Manjunatha, H .S. Mohana, P A Vijaya, **Machine Vision based Non-Magnetic Object Detection and Removal on Moving Conveyors in Steel Industry through Differential Techniques** ,International Journal of Computer Vision and Image Processing, 2(3), 66-77, July-September 2012. (IJ4)
28. B S Yogananda, H. S. Mohana, G. Shivakumar, **Computer Aided Diagnosis For the Detection of Lung Nodules**, IOSR Journal of Engineering, ISSN: 2250-3021, Vol 2, Issue 7(July 2012), PP 134-136 (IJ3)

29. H.S. Mohana, M. Ashwathakumar, G. Shivakumar, B S Yogananda, **Object Counting and Classification from Estimated Traffic Flux Density Using Contour Extraction**, GJCAT, Vol 1(1), 2011, 39-51 (IJ2)
30. H. S. Mohana, M. Ashwathakumar, G. Shivakumr, K.C. Manjunath, **Detection And Classification Of Moving Objects by Using Real Time Traffic Flux through Differential Analysis**, International journal of computer, Mathematical sciences and applications, Serial Publications, New Delhi, Jan-June 2009 (IJ1)

#### **Webinars attended:**

1. Participated in the webinar on “ **Review paper writing for high impact factor journals**” organized by Department of Mechanical Engineering, Navkis College of Engineering, Hassan, on 25 July 2020.
2. Attended the webinar on “ **Routing in Wireless Sensor Networks**” organized by Department of Electronics and Communication Engineering, Navkis College of Engineering, Hassan on 30 July 2020.
3. Participated in the webinar on “ **IMAGE FUSION – Applications and Research Avenues**” , organized by the Department of Computer Science and Engineering, NCE, Hassan on 3 August 2020.
4. Participated in the webinar on “**Agile Methodologies and DevOps Philosophy for Academic and Research Projects**” , organized by the Department of Computer Science & Engineering, NCE, Hassan in association with BiTES, Bengaluru on 12 September 2020.
5. Attended the webinar on “**Towards Connected Cities: Smart Cop as a Use-case**” organized by IEEE Mysore Sub Section in association with IEEE Bangalore Section & IEEE Information Theory Society Bangalore Chapter on 27 February 2021.
6. Attended the webinar on “**Personality Development**” organized by IEEE Mysore Sub Section in association with IEEE Bangalore Section on 6<sup>th</sup> March 2021.
7. Attended the webinar on “ **Novel Two-Factor Honey Token Authentication Mechanisms**” organized by IEEE Information Theory Society (ITS) Bangalore Chapter, in association with IEEE Bangalore Section and IEEE Mysore Subsection on 8<sup>th</sup> March 2021.
8. Attended the webinar on “**Useful Skills for Fruitful Life**” organized by IEEE Mysore Sub Section in association with IEEE Education Society and WIE affinity group Bangalore Section on 8<sup>th</sup> March 2021.
9. Attended the webinar on “ **Detection of Cyber Grooming through the use of Behavioral Biometrics**” organized by IEEE Information Theory Society (ITS) Bangalore Chapter, in association with IEEE Bangalore Section and IEEE Mysore Subsection on 15<sup>th</sup> March 2021.
10. Participated in **WIInnovate- A talk on “Journey of Innovation**” by Ms. Swathi Maini, Founder, Norris Turbines, Singapore, organized by IEEE Mysore Subsection on 17 March 2021.
11. Participated in **WIInnovate- A talk on “ Journey of Pi and Beyond**” by Dr. Aishwarya Bandla, Head – N1 transnational core, National University of Singapore, Professional Activities Chair, IEEE Singapore Section, organized by IEEE Mysore Subsection on 18 March 2021.
12. Attended the International webinar on “Machine Learning with Impact” organized by IEEE Student Branch- GSSS Institute of Engineering and Technology for Women, Mysore in association with IEEE Mysore Subsection and IEEE Bangalore Section on 19<sup>th</sup> March 2021.
13. Participated in webinar series **WI Research- A talk on “MEMS Applications and Platforms**” by Dr. Veda Sandeep, Senior Scientist, Tyndall National Institute, Ireland, organized by IEEE Mysore Subsection on 21<sup>st</sup> March 2021.

14. Attended the webinar on “**Optimal Design of Serosurveys for Disease Burden Estimation**” organized by IEEE Information Theory Society (ITS) Bangalore Chapter, in association with IEEE Bangalore Section and IEEE Mysore Subsection on 22<sup>nd</sup> March 2021.
15. Participated in the **International webinar series** from 26<sup>th</sup> to 29<sup>th</sup> March 2021 organized by IEEE Mysore Subsection on the occasion of international women's day celebrations.
16. Participated in the webinar on “**IEEE Educational Activities**” organized by IEEE India Council on 26<sup>th</sup> March 2021.
17. occasion of International Women's Day held on 30<sup>th</sup> March 2021.

#### **Books Published/Reviewed:**

1. **Text Book Review: Electronic devices and Circuits** by **David A Bell**.
2. Dr.H S Mohana, Rajith kumar B K and Uday J published the book with title “**Pattern Recognition Techniques for Kannada Script Analysis**” in LAMBERT Academic Publishing (LAP) in the year 2020.

#### **Chapters Written:**

1. **Dr. H S Mohana** and **Mr.Mahanthesh U** Published Research Article titled “*HUMAN ACTION RECOGNITION USING STIP EVALUATION TECHNIQUES*” in Progress in Advanced Computing and Intelligent Engineering. Advances in Intelligent Systems and Computing, vol 1198. Springer, Singapore. [https://doi.org/10.1007/978-981-15-6584-7\\_38](https://doi.org/10.1007/978-981-15-6584-7_38), Print ISBN :978-981-15-6583-0, Online ISBN: 978-981-15-6584-7, 30 October 2020.
2. **Real Time Input Text Recognition System for the Aid of Visually Impaired**, Lecturer Notes on Computational Vision, Chapter 16 ISBN:978-3-030-00664-8, Dr. H S Mohana, B K Rajith Kumar, Springer Nature Publishers, 2018
3. **Edge Detection of Degraded Stone Inscription Kannada Characters using Fuzzy Logic Algorithms**, Advances in Intelligent Systems and Computing (AISC) Series, ISSN No. 2194-5357, Dr. H S Mohana, B K Rajith Kumar, Springer, 2018
4. **Aruhu Kuruhu Visheshanga – Kannada Shasanagala Yantrika Oduvike: Kelavu Pryatnagalu**, (Page No.36-38), Dr. H S Mohana, B K Rajith Kumar, K Pratibha, Publisher - Ha. Thi Rathna, 2017
5. **Computer Vision Based Non-Magnetic Object Detection on Moving Conveyors in Steel industry through Differential techniques and Performance Evaluation**, Dr. H S Mohana, K C Manjunatha, P A Vijaya, IGI Global Publishers, 2014

### **NPTEL Certification:**

1. **NPTEL** online course completed in **Introduction to Ancient Indian Technology** complete 8-week course September-November 2021 funded by MHRD, Govt. of INDIA with **ELITE Silver**.
2. **NPTEL** online course completed in **Educational Leadership** complete 8-week course August-September 2018 funded by MHRD, Govt. of INDIA with **ELITE Gold**.
- 3.

### **Achievements:**

1. Recognised as a **IEEE CAS Bangalore Chapter-Outstanding Volunteer 2020**. In recognition of his Outstanding contribution towards IEEE CAS Bangalore Chapter.
2. **Honoured as session Chair:** IEEE Third International conference on Multimedia Processing, Communication and Information Technology-MPCIT 2020 -being a part of the successful execution of the conference as a session chair, Department of Electronics & Communication Engineering, JNN College of Engineering, Shivamogga.
3. Worked as Subject expert: Board of Appointments Committee Meeting held on 06-09-2020 for selection of Assistant Professors to the Departments of Electronics & Communication Engineering, Electronics & Instrumentation Engineering, Siddaganaga Institute of Technology, Tumkuru.
4. **Elevated and Recognized** as IEEE Senior Member.
5. Working as **Executive committee member** of IEEE Mysuru Subsection 2021.
6. Working as **Permanent Invited Executive committee member** of IETE Mysuru Section 2021.