Curriculum Vitae

Dr. Shivanand Sharanappa Gornale,

Professor of Computer Science

School of Mathematics and Computing Sciences.

Rani Channamma University, Vidya Sangama, PB-NH4-

Belagavi -591 156–Karnataka Phone: +91-9739364083

E-mail: shivanand_gornale@yahoo.com,

shivanand1971@gmail.com, shivanand1971@rcub.ac.in ORCID ID: https://orcid.org/0000-0001-5373-4049 Web of Science Researcher-ID: AAI-6603-2020



CAREER OBJECTIVE:

I am seeking a challenging position with a reputed organization that is rapidly expanding, adopting and offers good advancement potential in academics, research and development. I would like to be a position with a strong emphasis on Academics, Research and Development.

PERSONAL INFORMATION

Name : Shivanand Sharanappa Gornale

Designation : Professor of Computer Science

Mailing Address : Dr. Shivanand Sharanappa Gornale

Professor of Computer Science,

School of Mathematics and Computing Sciences,

Department of Computer Science

Rani Channamma University, Vidya Sangama, PB-NH4-

Belagavi -591 156-Karnataka

Residence Address : Dr. Shivanand Sharanappa Gornale

Plot No. 69 CTS No4482B/67. Shruthi Layout, Near Little Scholars Academy, Kanabargi Road, Belagavi City 590016

Date of Birth : 1st July-1971

Passport Details : Passport No: \$4312401, Expiry Date: 25th, June-2028.

Languages known : English, Hindi, Kannada, Marathi

EDUCATIONAL QUALIFICATION

- Ph.D. (Computer Science) University of Pune, Pune-Maharashtra India. Ph.D. Research topic is, "Development of Compression technique for Noisy Image: A Multi-Wavelet approach" Under the guidance of Dr. K.V. Kale-2009
- M.Phil. (Computer Science), Manonmaniam Sundarnar University (MSU), Thirunelvelli, Tamil Nadu-India- 2003. Dissertation: "Application of power lines in PC-to-PC Communication, their Problems and Solutions"
- M.Sc. (Computer Science), Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra-India -1995
- B.Sc. (Physics, Mathematics and Electronics), Gulbarga University Gulbarga, March/April 1993

TEACHING EXPERIENCE AND RESEARCH EXPERIENCE

Teaching Experience:

- Working as **Professor of Computer Science**, School of Mathematics and Computing Sciences, Rani Channamma University, Vidya Sangama, NH4-Belagavi –Karnataka from **04.09.2016** to till date
- Worked as Associate Professor of Computer Science, School of Mathematics and Computing Sciences, Rani Channamma University, Vidya Sangama, NH4-Belagavi – Karnataka from 04.09.2013 to 03-09-2016
- Worked as Assistant Professor and Coordinator, Post Graduate Department of Computer Science, Government College (Autonomous), Mandya – Karnataka (Affiliated to University of Mysore) from 26.02.2008 to 03.09.2013
- Worked as Asst. Professor and Head, Vidyapratishtan's' Institute of Information Technology (VIIT), Baramati Pune-Maharastra (Affiliated to University of Pune and AICTE, New Delhi) from 01-08-2006 to 20-02-2008
- Worked as a Lecturer and Head, Department of Computer Science, Channabasaveshwar Degree College Bhalki (Affiliated to Gulbarga University, Gulbarga) from 26-07-1995 to 31-07-2006.

Research experience:

- Completed Minor Research Project sanctioned by UGC New Delhi entitled "Study of Fingerprint image de-noising techniques through Decimated and Un-decimated Wavelet Transform (WT). (Ref.No. UGC/MRP(s)/0286/08-09/KAMY022) (completed)
- Working as Mentor on Project Under Women Scientist Scheme-B(WOS-B) entitled "Detection and Analysis of Osteoarthritis in Knee X-ray images using Machine Vision", By DST, New Delhi for 03 Years- 2017-18 to 2019-2020 (22,10,000/- Completed)
- Doing research work in Image Processing and pattern recognition for Biometric, Medical Imaging application and Networking (Since 1999).

Research Area of Interest:

• Image Processing, Computer Vision, Image Data Compression, Wavelets, Information Communication Technology, Biometrics Data Analysis

Research Guidance:

- Recognized Research Guide for **Ph.D. in Computer Science** School of Mathematics and Computing Sciences, Rani Channamma University, Vidya Sangama, PB-NH4- Belagavi -591 156–Karnataka
- Recognized Research Guide for **Ph.D.** in **Computer Science and Engineering**, Jain University, Bangalore.
- Recognized research guide for M.Phil in Computer Science of Algappa University, Karaikudi Tamil
 Naidu 12 students awarded degree under my guidance.
 http://www.alagappauniversity.ac.in/downloads_pdf/mphil_computer_guide.pdf
- 07 Ph.D. Students awarded.
- Guided Two Projects for AVISKAR-2007 Research Festival, University of Pune.
- Guided more than 250 Projects for M.Sc., MCA and M. Tech. in Computer Science/ Computer Applications under University of Pune, University of Mysore, Gulbarga University Gulbarga and Rani Channamma University, Belagavi.
- Presently **06 Ph.D. students are working** under my supervision Rani Channamma University, Belagavi in the area of Digital Image Processing, Pattern Recognition and Computer Networking

Google Scholar Citations

Citations 994 h-index 18 i10-index 34

Prof. Shivanand Sharanappa Gornale - Google Scholar (beds.ac.uk)

Countries Visited:

1. Thialand. 2. Malasiya

Teaching Experience in other Institutions:

From 04-12-2000 to 31-04-2001, as a part time Lecturer in **Post Graduate Diploma in Computer Application (P.G.D.C.A) Course**, Karnataka Commerce College, Bidar (Affiliated to Gulbarga University).

ACADEMIC AND ADMINISTRATIVE EXPERIENCE

- Worked as Registrar (Evaluation), Rani Channamma University, Vidya Sangama, PBNH4-Belagavi Karnataka from 06.06.2022 to 04-10-2023
- ➤ Worked as a **Director**, **IQAC** Rani Channamma University, Vidya Sangama, PBNH4-Belagavi Karnataka from **19.12.2018** to **15.06.2022** (Additional Charge).
- Worked as a Taskforce Committee Member NEP-2020, Rani Channamma University, Belagavi
- > Worked as a Nodal Officer, Digital Fluency, Rani Channamma University, Belagavi
- Worked as a "E-governance Nodal Officer", Rani Channamma University, Belagavi
- Worked as a Deputy Registrar(DPAR), Rani Channamma University, Vidya Sangama, PBNH4-Belagavi
 -Karnataka from 16.11.2015 to 18.12.2018 (Additional Charge)
- Worked as AlSHE Nodal Officer of Rani Channamma University, Vidya Sangama, PBNH4-Belagavi Karnataka
- ➤ Worked as a **Deputy Registrar**, Rani Channamma University, Vidya Sangama, PBNH4-Belagavi Karnataka from **12.12.2014** to **29.01.2015** (Additional Charge)
- Worked as a **Deputy Registrar(Evaluation**), Rani Channamma University, Vidya Sangama, PBNH4-Belagavi –Karnataka from **21.09.2013** to **11-12-2014** (Additional Charge)
- Worked as a Controller of Examinations (COE) of Autonomous College from 01-04-2009 to 03.09.2013 in Government College, (Autonomous), Mandya(Additional charge)

ACHIEVEMENTS AND AWARDS

- ₽ Presented paper in IEEE sponsored International Conference on 4th International Conference Computer Graphics, Imaging and Visualization (CGIV-07) 14, 15 17 August 2007, Bangkok, Thailand,
- **♣ Nominated for "Best Teacher Award"** for the academic year 2006-2007 under University of Pune, Pune (Maharashtra)India
- ₩ "Vidyabhushan" Award 2010, by INSA (Indian NET-SET Association, Amravati), Maharashtra-India
- "Research Fellow" at INTI International University, Malaysia up to 31-12-2025

INTERNATIONAL/NATIONAL CONFERENCE/WORKSHOP/SEMINAR PARTICIPATED

INTERNATIONAL CONFERENCE

- 1. Attended **International Conference** on "ICT in Education and Development" organized by AISECT Bhopal (M.P) India from December 16-17-18, 2004.
- 2. Attended International Conference on Systemic, Cybernetics, and Informatics ICSCI-2006-Hyderabad-India from 4th –8th Jan-2006.
- 3. Attended three days **IEEE-International Conference** on Signal and Image Processing (IEEE-ICSIP-06) 7-9th Dec 2006, Hubli Karnataka.
- 4. Attended International Conference on Systemic, Cybernetics, and Informatics ICSCI-2007-Hyderabad-India from 3th –7th Jan-2007.
- 5. Attended the **IEEE-International Conference** on Computer Graphics Imaging and Visualization (CGIV-07) 15-17th, August 2007, Bangkok Thailand.
- 6. Attended the **IEEE-International Conference** on Advances in Computer Vision and Information Technology (IEEEACVIT-07) 28-30th November, 2007, Aurangabad (MS)-India
- 7. Attended the **International Conference on** "Managing Next Generation Software Applications-08(MNGSA-2008) 05-06-December 2008 –Coimbatore-India.

- 8. Attended the IEEE Sponsored International Conference on Advances in Computer Vision and Information Technology (IEEE-ACVIT-09) 16th 19th December, 2009, Department of Computer Science & IT Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-Maharashtra-India
- 9. Attended and chaired the session in third **International Conference** on Cognition and Recognition (ICCR)-2011 Organized by the Department of Computer Science University of Mysore- India 09-10th, Dec-2011.
- 10. Attended and chaired the session in **International Conference** on Multimedia Processing Communication and Computing Applications organized by the Department of MCA on 13th-15th Dec-2012, PESIT, Bangalore-India
- 11. Attended and Chaired the session on "Symposium on network Security and Computer Vision" at 103rd Indian Science Congress held at University of Mysore, Mysure on 03-7th Jan-2016
- 12. Attended and Chaired the Session in First International Conference on Recent Trends in Image processing and Pattern Recognition(RTIPR), 16-17th December-2016 organized by Post Graduate Department of Computer Science, Karnataka Commerce College Bidar, Karnataka.
- 13. Attended and Chaired the Session in International Conference on Cognition and Recognition (ICCR-2016) on 30th and 31st of December, 2016 in MIT Mysore-Karnataka.
- 14. Attended and Chaired the Session in International Conference on Recent Trends in Computer Science, Engineering and Technology (ICRACSET-2017) on 3rd Feb-2017, MGM's Dr. G Y Patrekar College of Computer Application and Information Technology-Aurangabad-Maharshtra-India
- 15. Attended International Conference on eITBM-2018 at VIIT, Baramati, 12th to 13th Feb-2018 Maharashtra-India.
- 16. Attended East Asia Regional Conference of International Biometric Society-2108 to be held at Department of Medical Biometrics and Informatics(Biostatics), JIPER, Pondichery scheduled on 16th and 17th Feb-2018.
- 17. Attended an Chaired the Session in 3rd Biennial International Conference on **Recent Trends in Image Processing and Pattern Recognition(RTIP2R)**, Jan, 3-4th, Jan-2020, Organized by Department of

 Computer Science & IT Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-MaharashtraIndia
- 18. Attended and Chaired the Session in International Conference on Advances in Computer Vision and Artificial Intelligence Technologies ACVAIT2022: Organized by Department of Computer Science and Information Technology, Dr. B A M University, Aurangabad, India, August 1-2, 2022
- 19. Attended and Chaired the session in International Conference on "Innovations in Computational and Physical Silences for Sustainable Development (ICPSSD-2022) organized by Vijayanagara Sri Krishnadevaraya University, Bellary 21-23, Dec-2022, Karnataka India

NATIONAL CONFERENCE

- 20. Attended a **National conference** on "Language Engineering" Conducted by University of Hydra bad, Hyderabad. From 13th 15th December -2002.
- 21. Attended a **National conference** on "Computer Communication & Security" Jointly conducted by Dr. B.A. Marathwada University Aurangabad & IETE Aurangabad from 4th –5th Jan- 2004.
- 22. Attended **National Conference** on "e-Learning Challenges and Opportunities in the Indian context" Organized by Computer Society of India (CSI) and BBCIT Hyderabad -India on 29-10-04 to 30-10-04.
- 23. Attended **National Conference** on "Geometry, Analysis, Fluid Mechanics and Computer Applications" Organized by the Dept. of Studies in Mathematics and Computer Science, Kuvempu University, Shankaraghatta Karnataka, India on 9th, 10th and 11th Dec-2004.
- 24. Attended Two days **National Conference** on "Advancement in Information Technology and Internet Security", SIBAR Pune Maharashtra -India 4-5 Jan, 2008.
- 25. Attended two days **National seminar** on "Image Processing and Pattern Recognition" conducted by Karnataka Arts, Science and Commerce College, Bidar Karnataka during 15th-16th Feb-2010
- 26. Attended Two days National Conference on "Recent Trends in Computer Application" Conducted by Department of Management Science, DR BAMU Aurangabad-(MS) during 17th-18th Feb-2010
- 27. Attended **98th Indian Science Congress** organized by SRM University Chennai from 03-01-2011 to 07-01-2011
- 28. Attended **99th Indian Science Congress** organized by KIIT University Bhuvaneshwar from 03-01-2012 to 07-01-2012

- 29. Attended one day UGC Sponsored **National conference** on "Managerlization-2012", organized by Department of MBA and MCA Dr. BAMU, Aurangabad Sub-campus Osmanabad-Maharashtra on 18-02-2012.
- 30. Attended and chaired the session in **National Conference** on "Computer Networks and soft Computing NCNS-12 organized by the Department of Computer Science Engineering on 6th and 7th Nov-2012, SIT, Tumkur
- 31. Attended and chaired the session in UGC Sponsored **National Conference** on "Core Competency in Computing" organized by the Post Graduate Department of Computer Science on 22nd and 23rd Feb-2013, JSS College Ooty Road Mysore.
- 32. Attended and chaired the session at **National Conference** on Recent Trends in Computer Science and Applications and Computational Mathematics" 20th and 21st Dec-2013, Indira College, Pune-Maharashtra.
- 33. Attended UGC sponsored **National conference** on "Machine Learning and Pattern Recognition "held on 1st and 1nd Feburuary-2014, C. B. College, Bhalki, Dist Bidar-Karnataka.

WORKSHOP/SEMINAR

- Attended a One-day Workshop on "Effective Teaching Skills" conducted by Rotary Club Bidar, Bidar on 14th Oct-2000.
- 35. Attended a one day **workshop** on "Preparation of the B.Sc./B.Com/B.A (Computer Science/ Computer Applications) Syllabus under semester scheme" on 07-08-2003, at Gulbarga University Gulbarga
- 36. Attended a **One-day Seminar** on "Vocationalization of Higher Education " and interface meeting regarding Career Oriented Program at undergraduate level by University of Madras on 11th –14th, Feb-2004.
- 37. Attended a **workshop** on "E-Education" Organized by Department of Computer Science and IT and Department of Library and Information Science and University Library, Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Aurangabad on 16th Sept.2004
- 38. Participated a Three-day **National Seminar** on "Role of NSS in the formation of youth in the New Millennium" Jointly conducted by Gulbarga University Gulbarga (NSS), State NSS Cell, and Department of information, Tourism & Youth Services Government. Karnataka, Bangalore from 7th Jan to 9th Jan-2005 at Gulbarga University Gulbarga.
- 39. Attended a workshop on "Embedded System and Its applications" Organized by Department of Computer Science and IT Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Aurangabad and IETE Aurangabad Sub center Aurangabad on 7th March, 2006
- 40. Attended a One-day **Workshop** on "MCM Syllabus Orientation Program " Conducted by VIIT, Baramati(MS)-India on 2nd September-2006
- 41. Attended Two days **workshop** on "Software Project Management" at PVG Engineering College, Pune-Maharashtra –India on 22nd -23rd, June, 2007.
- 42. Attended **Six days workshop** on "Computational Neuroscience" conducted by SIBACA, Pune Sponsored by University of Pune and CSIR New Delhi from 23-06-2008 to 29-06-2008.
- 43. Attended one day workshop on **Faculty development workshop and Orientation programme** on 24th October 2013 at Rani Channamma University, Belagavi- Karnataka.
- 44. Attended two days National Seminar on" Women Empowerment During 21st Century in India", on 22nd-23rd November- 2013 sponsored by ICSSR New Delhi at Rani Channamma University, Belagavi-Karnataka.
- 45. Attended Two days workshop on "**Web Technology**" at S.B Arts and KCP Science college, Bijapur jointly organized Rani Channamma University, Belagavi on 25th and 26th November-2013.
- 46. Attended One Day UGC Sponsored National Workshop on Recent Developments in **Digital Image Processing and Pattern Recognition-2014**, organized by Dept. of Computer Science, Gulbarga University, Gulbarga on 30th May 2014.
- 47. Attended UGC Sponsored National Conference on "The Role of Information and Communication Technology in the Higher Education of Rural Areas", organized by Department of Physics and Computer Science, at Maharahtra Mahavidyalaya, Nilanga on 8-9th August-2014

- 48. Attended and chaired the session in one day seminar on "E-Resources for Teaching, Learning and Research (ERTLR-2014)" on 03.11.2014 in the PG Department of Computer Science, Karnataka Commerce College, Bidar- Karnataka in association with Spoken tutorial project IIT, Mumbai.
- 49. Attended one day National Workshop on "New Innovations in Cloud Computing for Big Data" on 19th December-2015 organized by IQAC and PG Department of Computer Science, Karnataka Commerce College, Bidar- Karnataka in association with Manjrasoft, Australia
- 50. Attended one day workshop on "A Precursor for Quality Assessment", on 17th March- 2016 at Rani Channamma University, Belagavi- Karnataka.
- 51. Attended one day workshop on "Curriculum Design: Outcome Based Educational Model", on 6th April- 2016 at Rani Channamma University, Belagavi- Karnataka Jointly organized in collaboration with Higher Education Council, Govt. of Karnataka.
- 52. Attended one day workshop on "Recent Advances in Optical Communication Networks", on 29th May-2017 at Higher Education Council, Govt. of Karnataka.
- 53. Attended one day National Symposium on "Industry-Academia Research Meet on Data Science", Vivekananda College, Aurangabad-Maharashtra in collaboration Society of Data Science-India on 02-03-2019.
- 54. Chief Guest for ALCHEMY-2019-National Level **Mega-IT Fest** Organized by People Tree Education Society's College of BCA, Belagavi on 15-03-2019
- 55. Attended one day workshop on "Awareness Programme on NAACs Assessment and Accreditation Process for Affiliated Colleges of Karnataka University and Rani Channamma University, Belagavi", held on 27th, Sept-2019 at NAAC office Bangalore.
- 56. Resource Person, One Day State Level Seminar on **Cloud Computing** organized by Arts, Commerce, Science and BCA College, Harurgeri- Karnataka on 13-10-2019.
- 57. Attended 05 days on line certification program on "Artificial Intelligence" conducted by Agimus Technologies PVT ltd, Bangalore from 4th, May-2020 to 8th, May-2020
- 58. Attended One day workshop on "Revitalizing Student Mentoring System in Rani Channamma University", Belagavi on 4th Feb-2021 organized by PMEB and Social Work Department, RCU, Belagavi.
- 59. Attended two days Online FDP on "Deep Learning Using MATALAB" organized by Corel Technologies Bangalaore on 24th, Feb-2021 to 25th, Feb-2021.
- 60. Attended and acted as Session Chair in International Conference on "Artificial Intelligence and Soft Computing" organized by Department of Computer Science, Akkamahadevi State Women University Vijayapura Karnataka 11th, Feb-2021 to 13th, Feb-2021
- 61. Attended One day workshop on "National Education Policy-2020" organized by Rani Channamma University, Belagavi in Collaboration with RLS College Belagavi on 13th, October-2021

TRAINING PROGRAMES AND COURSES PARTICIPATED

a) Orientation Course

- Attended the 84th Orientation Course conducted By University of Mysore Mysore, from 7th Oct-2009 to 3rd Nov-2009 delivered the Seminar on "Biometrics and its Application" and Secured A Grade
- 2. Attended the 21st Orientation Course conducted By BANARAS HINDU UNIVERSITY Varnasi, from 5th May 1998 to 1st June 1998 and delivered the Seminar on "E-Mail"
- 3. Attended the 10 days N.S.S. Orientation Course Conducted by TOC, center Mysore University, Mysore from 8-11-2001 to 17-11-2001.

b) Refresher Course

- 4. Attended Refresher Course in Computer Science and Information Technology Conducted by Dr. Babasaheb Ambedkar Marathwada University Aurangabad, Maharashtra-from 08th –28th March-2011 and Secured A Grade
- 5. Attended Refresher Course in Computer Science Conducted by "University of Pune, Pune from 08th –28th November-2005 and Secured A Grade

c) Training Programme

- 6. Attended three days Training Program on "Wavelets and Advanced Wavelets" 31-01-2006 to 02-02-2006, Government Engineering College, Aurangabad-India.
- 7. Attended 07 days "Teacher Empowerment Training for Asst. Professor of Government First Grade Colleges Mysore Region" from 05-05-2012 to 11-05-2012 organized by Karnataka Knowledge commission and Regional Directorate of Collegiate Education, Mysore-05 at Government. College, Mandya.
- 8. Attended **one month** internship programme on "Core MATLAB and its Applications for Image Processing and Machine Learning" held from 10th May to 9th June 2021, from Sandeepani School of Embedded System Design, Bangalore.
- 9. Completed the **CLARIVATE Journal Citation Reports(JCR**) Certification Series-2021 on 08-07-2021 (Certificate ID: 12767057696)
- 10. Participated and completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Artificial Intelligence" from 20-09-2021 to 24-09-2021 at Dr. Bababasheb Ambedkar Marathwada University, Aurangabad (Certificate No. ATAL/2021/1631009644)

INVITED TALK/LECTURE DELIVERED

- Delivered talk on" Document Image Analysis for Forgery Detection using Digital Image Processing Techniques", National conference on Computer Science and Information Technology", organized by Shivaraj College of Arts, Commerce and D.S. Kadam Science College, Gadhinglaj, Dist Khollapur sponsored by Shivaji University, Khollapur-Maraharshtra 15th, Fabruary-2024
- Delivered talk on" Mathematics in Data Science: Towards Data Representation, Clustering, Classification and Analysis in International conference on Computational Mathematics Organized by Department of Mathematics, Sadguru Gadage Maharaj College (Autonomous), Karad, Maharashtra on 03-02-2023
- Delivered talk on" **Data Representation: Clustering, Classification and Analysis** "in the three days First International conference on Applications of Artificial Intelligence in Industry and Society organized by the School of Computational Sciences Swami Ramanand Teerth Maratawada University, Nanded Maharashtra-India on 28th-30th, March-2022
- Delivered talk on" Data Representation: Clustering, Classification and Analysis "in the two days interdisciplinary National conference on "Recent Trends in Mathematical Modelling, Simulation Methods, Computations and Physical Sciences", organized by HISLOP College, Nashik Marharashtra 08-09-2021
- Delivered talk on "Fundamentals of Digital Image processing", in the National level Webinar on Digital image processing and Computer vision @Karnataka Commerce College, Bidar Karnatkata on 31-05-2021.
- Delivered talk in UGC-Human Resource Development Center, Aurangabadis organizing a Pre-Phd Course work from (02/01/2021 to 15/02/2021) topic: Data Representation: Clustering and Classification on 04-01-2021
- Delivered talk on "DEEP LEARNING: Theoretical and Practical Approach", AICTE sponsored Online STTP on "Deep Learning Tools & Techniques" from 07/12/2020 to 12/12/2020", organized KLE Dr. M. S. Sheshgiri College of Engineering & Technology, Udyambag, Belagavi 590008 on 7th December 2020
- Delivered talk on "Computer Aided Systemization for the detection of OA in Knee X-ray Images"
 One-Day National Webinar on "Computer Applications in Medical Science", Karnatak University's
 KARNATAK SCIENCE COLLEGE, DHARWAD Organized by IQAC and Dept. of Computer Science
 Organizing on 01-12-2020.
- Delivered talk on "The Role of ICT in Teaching, Learning and Research Education Towards the digitization", UGC-HRD- Online Refresher Course on "Emerging issues in Information Communication Technology" (Inter Disciplinary) from 12th October 2020 to 24th October, 2020, DR. BAMU, Aurangabad- Maharashtra (15-10-2020)
- Delivered talk on "Multimodal Biometric Data Analysis for Gender identification", AICTE sponsored STTP on Bio-Medical Systems Design using Artificial Intelligence & Machine Learning "from 7th to 12th September 2020, G H Raisoni College of Engineering, Nagpur-Maharashtra (10-09-2020)

- Delivered Lecture on "Document Image Analysis for Forgery Detection using Digital Image Processing techniques", One day e-seminar On "The role of Mathematics and computer science in Artificial Intelligence (AI) and Machine learning" Organized by Department of Mathematics and Statistics, Date: 31st, August 2020., Krishna Mahavidyalaya, Shivanagar, Karad, Satara- Marahastra
- Delivered talk on "Hard Biometric Data Analysis, towards the Estimation of Soft-Biometrics", at Virtual National Symposium on Soft biometrics organized by Dr. G Y Patrekar College of Computer Science and Information Technology, Aurangabad Maharashtra on 18th, May-2020
- Delivered talks on "Next Generation Human Identification And Verification: Revisiting Biometric Technologies..." and "Medical Imaging in Clinical Applications: A Computer Aided Approach", at Human Resource Development Center, Bangalore University, Bangalore Refresher Course in Computer Science, Sponsored by UGC from 08.12.2018 to 29.12.2018.
- Attended and Delivered talk on "Human Identification and Verification-Revisiting Biometric Technologies........ A Machine Learning Approach International Conference on eITBM-2018 at VIIT, Baramati, 12th to 13th Feb-2018 Maharashtra-India.
- Attended and presented a paper in East Asia Regional Conference of International Biometric Society-2108 to be held at Department of Medical Biometrics and Informatics (Biostatics), JIPER, Pondichery scheduled on 16th and 17th Feb-2018.
- Attended and Chaired the Session at 6th National Conference on Recent Trends in Computer Science and Applications and Computational Mathematics" 22nd and 23rd Dec-2017, Indira College, Pune-Maharashtra.
- Chief Guest for "Annual Day Function" M P Miriji College of Commerce, P G Department of Commerce, Belagavi on 19th May-2017.
- Attended and Delivered talk on "Detection and Analysis of Osteoarthritis in Knee X-ray Images: A
 Machine Vision at UGC Sponsored National Conference on "Innovations in Computer Science,
 Communications and Information Technology (INNOVTIT-2017), 7th and 8th April-2017, Latur Maharashtra-India.
- Attended and Delivered talk on "Next Generation Human Identification and Verification: Revisiting Biometric Technologies..." at one State Level Seminar on "Growing Trends in Computer Science and Application" on 4th Feb-2017 at St Mira's College for Girls Pune- Maharashtra-India.
- Attended and Chaired the Session in International Conference on Recent Trends in Computer Science, Engineering and Technology (ICRACSET-2017) on 3rd Feb-2017, MGM's Dr. G Y Patrekar College of Computer Application and Information Technology-Aurangabad-Maharshtra-India
- Chief Guest for "Aavishkar-V.17" Technical Fest at Bharatesh College of Computer Application, Belagavi on 27th Jan-2017.
- Attended and Chaired the Session in International Conference on Cognition and Recognition (ICCR-2016) on 30th and 31st of December, 2016 in MIT Mysore-Karnataka.
- Delivered plenary talk on "Next Generation Human Identification and Verification: Revisiting Biometric Technologies..." at UGC Sponsored National Conference on "Current Advances in Human Computer Interaction" on 23rd -24th December 2016 at COCSIT, Latur-Maharashtra.
- Attended and Chaired the Session at National Conference on Recent Trends in Computer Science and Applications and Computational Mathematics" 22nd and 23rd Dec-2016, Indira College, Pune-Maharachtra
- Attended and Chaired the Session in First International Conference on Recent Trends in Image processing and Pattern Recognition(RTIPR), 16-17th December-2016 organized by Post Graduate Department of Computer Science, Karnataka Commerce College Bidar, Karnataka.
- Delivered special lecture on "Biometrics for Next Generation: Security Issues and Challenges" in Post Graduate Department of Computer Science, Karnataka Commerce College Bidar, Karnataka on 6th May-2016.
- Delivered special lecture on "Next Generation Human Identification and Verification" in Department of Computer Science, Government College, Bidar Karnataka India on 5th May-2016.
- Attended and Chaired the Session in UGC Sponsored National Conference on Recent Trends in Image processing and Pattern Recognition(RTIPR), 2nd-3rd, April-2016 organized by Post Graduate Department of Computer Science, Karnataka Commerce College Bidar, Karnataka
- Delivered talk on "Research Avenues in Digital Image Processing and Pattern Recognition", in Dept of Computer Science and IT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-India on 18th April-2016.

- Delivered special lecture on "Next Generation Human Identification and Verification: Revisiting Biometric Technologies..." in Department of Computer Science, Government Institute of Forensic Science, Nagpur -Maharashtra, India on 21st March-2016.
- Delivered special lecture on "Research issues in Digital Image Processing and Machine Vision"," in Department of MCA, Vachana Pitamaha Dr. P. G. Halkatti College of Engineering and Technology, Bijapur-Karnataka India on 19th March-2016.
- Delivered two plenary talks on "Next Generation Human Identification and Verification: Revisiting Biometric Technologies..." and "Research issues in Digital Image Processing and Machine Vision" at UGC Sponsored National Workshop on Processing and Image Processing, in Department of Computer Science, North Maharashtra University, Jalgoan-Maharashtra, India on 21st-23rd Jan-2016.
- Delivered Talk on "Research issues in Digital Image Processing and Machine Vision", at 4th National Conference on Recent Trends in Computer Science and Applications and Computational Mathematics" 16th Jan-2016, Indira College, sponsored by Savitribai Pule Pune University, Pune- Pune-Maharashtra- India
- Attended and Chaired the session on "Symposium on network Security and Computer Vision" at 103rd Indian Science Congress held at University of Mysore, Mysure on 03-7th Jan-2016
- Jury Member for TECHOGACM-2015 IT QUIZ Competition on 12th Dece-2015 held at PG Department of Computer Science, Government College (Autonomous), Mandya Karnataka.
- Attended and chaired in 8th IEEE sponsored "National level Technical Contest"-HIT-QUEST-2015 on 10.10.2015 at Hirasugar Institute of Technology, Nidasohi-Belagavi
- Delivered talk in "Role of ICT in e-Learning", at NAAC sponsored National Conference at B K College, Belagavi- Karnataka on 3r and 4th March-2015
- Delivered Talk on "Revisiting to Biometrics Technologies: Towards the Gender Classification", at 3rd National Conference on Recent Trends in Computer Science and Applications and Computational Mathematics" 21st Feb-2015, Indira College, Pune-Maharashtra.
- Delivered Talk on "Biometrics Technologies: Limitation and Challenges", at National Workshop on Cyber Security and Cyber Crimes, on 15th Feb-2015, MIT, CIDCO, Aurangabad, Maharashtra.
- Resource Person for **National Integration Camp-2014-2015** organized by NSS Unit by Rani Channamma University in association with Youth Empowerment and Sports Department from 4th Feb-10th Feb-2015
- Delivered talk on "Research Methodology" on 24.11.2014 in the PG Department of Political Science, Government College (Autonomous), Mandya Karnataka.
- Delivered talk on "Image Understanding", in Dept of Computer Science and IT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-India under industrial lecture series on 11th Oct-2014.
- Delivered talk on "Scope for Research in Digital Image Processing and Pattern Recognition", in Dept of MCA, Sinhgad Institute of Business Administration and Research, Kondhwa, Pune on 10th Oct-2014.
- Delivered talk on "Image Processing and Its Applications" at UGC sponsored National conference on "Machine Learning and Pattern Recognition "held on 1st and 1nd Feburuary-2014, C. B. College, Bhalki, Dist Bidar-Karnataka
- Delivered talk on "Biometrics Technologies: Limitation And Its Future Challenges" at UGC sponsored National Workshop on "Matlab and Its Applications" held on 17th and 18th January-2014, G.S.S Degree College, Belgum-Karnataka
- Delivered talk on "Fundamentals of Research in Computer Science" on 12.10.2013 in the PG Department of Computer Science, Karnataka Commerce College, Bidar-Karnataka
- Delivered Talk on "Automatic Scene Text Recognition in image: Applications to Blind Persons", at National Conference on Recent Trends in Computer Science and Applications and Computational Mathematics" 21-22nd Dec-2012, Indira College, Pune-Maharashtra
- Delivered talk on "Image Processing Using MATLAB", in Dept of Computer Science and IT, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-India under industrial lecture series on 02nd August-2012
- Delivered talk on "Future Trends of Biometrics and its Challenges" and "Role of Mathematical tool in Digital Image Processing" 2nd Refresher Course in Mathematical Science from 9th to 29th January2012, Academic Staff College, University of Mysore-Mysore-Karnataka
- Delivered talks on "Role of IT in Research" and "E-learning through ICT" at Training Institute, Mysore for "Teacher Empowerment Training for Asst. Professor of Government. First Grade Colleges Mysore Region" from 01-05-2011 to 07-05-2011 organized by Karnataka Knowledge commission and Regional Directorate of Collegiate Education, Mysore-05.

- Delivered talks on "Role of IT in Research" and "E-learning through ICT" at Training Institute, Mysore for "Teacher Empowerment Training for Asst. Professor of Governament. First Grade Colleges Mysore Region" from 03-09-2011 to 09-09-2011 organized by Karnataka Knowledge commission and Regional Directorate of Collegiate Education, Mysore-05.
- Delivered talk on" Basic Research Concepts" at National Conference on UGC Sponsored "Recent Trends in Information Technology " 6th and 7th March-2011, Conducted by Dept of Computer Science C. B College, Bhalki, Dist Bidar-Karnataka
- Delivered talk on "Biometrics and its Application" in "Science day" at Government College for Women Mandya on 3rd March-2010.
- Delivered talk on" **Basic Research Concepts**" at National Conference on "Emerging Trends in Computer Application" 18-19th Feb-2010, Conducted by Dept of MCA, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-India
- Delivered talk on "Basic Research Concepts" for PG students [Physics] at Government College[Autonomous], Mandya on 05th April-2009
- Delivered talk on "Biometrics and its Application" in Science forum NDRK College, Hassan Karnataka on 17th March-2009.
- Delivered talk on "Biometrics and its Application" in Sharada Vilas College, Mysore- Karnataka on 9th April-2009
- Delivered talk on "Research Concepts" and "Biometrics and its Application" at 81st Orientation Programme Academic Staff College, Dr. Babasaheb Ambedkar Marathwada University Aurangabad-Maharashtra on 17th and 18th Feb-2010

MEMBER OF PROFESSIONAL /ACADEMIC BODIES

Professional Bodies

- ☐ Member of International Computer Science and Engineering Society (ICSES)(4041)
- □ **Life Member** of Indian Society of Criminology, Chennai-India (LM 1861)
- □ Life Member of The Indian Society for Technical Education(ISTE), New Delhi (MID-LM121715)
- ☐ Member International Biometric Society (IBS)-Indian Region (IBS Member ID number is 1291895) for the academic year 2017-18
- ☐ Member of Association for Computing Machinery(ACM) Advancing Computing as a Science & Profession (Membership No. 6840456)
- □ Sectional Committee Member of the section Information Communication Science and Technology (including Computer Science) for 2016-17 (104th Session of the Indian Science Congress).
- ☐ Life Member of Indian Red Cross Society, Belagavi District (Membership No.4004):
- □ Associate Member of Universal Association of Computer and Electronics Engineers (UACEE)-IRED (Membership No. AM1010002791) from 3rd Feb-2015 to 3rd Feb, 2018.
- □ Life Member of Indian Unit for Pattern Recognition and Artificial Intelligence, Indian Statistical Institute Calcutta (L098)
- □ **Fellow** of Institute of Electronics & Telecommunication Engineers (IETE), New Delhi (No. F176008).
- Member of International Association of Engineers (IAENG), Hong Kong (No. 62478)
- Member of ACM-Computer Science Teachers Association (ACM-CSTA/USA) {Order No 8549721 / Membership No. 6840456}
- Member of Indian Association for Research in Computer Science (IARCS), Tata Institute of Fundamental Research (TIFR), Mumbai
- ☐ Member of International Association of Computer Science and Information Technology (IASCSIT) Singapore (Membership No. 80331312)
- □ **Life Member** of Computer Society of India, Mumbai (No.01069229)
- □ Life Member of Indian Science Congress Association (No.L16598) Kolkata-India
- □ **Life Member** of Government. First Grade College Teachers Association of Karnataka(KGCTA), Bangalore (No.2686/2011-12)
- ☐ **Member:** IASTED: International Association of Science and Technology and Development www.iasted.org/TC.aspx

□ **Board Members** - International Association of Scientific Innovation and Research : www.iasir.net/boardmembers.html

Evaluation of Dissertation @ Various Universities (Ph.D./M.Phil /M.Tech./ M.Sc.)

- o University of Mysore, Mysuru, Karnataka- India
- o Sant Gadage Baba University, Amravati, Marahashtra-India
- o Rashtra Sant Tukadoji Maharaj Nagpur University, Nagapur, Marahashtra-India
- Savitribai Phule Pune University, Pune, Marahashtra-India
- Tilak Maharashtra Vidyapeeth, , Marahashtra-India
- o North Maharashtra University, Jalgaon, Marahashtra-India
- o Veer Narmad Saurashtra University(VNSGU), Surat, Gujrat
- o Shivaji University, Kholapur, Marahashtra-India
- o University of Bangalore, Bangalore, Karnataka- India
- o Bharati Vidyapeeth, Pune, Marahashtra-India
- Vishvesharayya Technological University, Belagavi(VTU), Karnataka- India
- o Karanataka University, Dharwad, Karnataka- India
- o Bharati Vidyapeeth, Pune, Marahashtra-India
- o Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, , Marahashtra-India
- o Central University of Hyderabad, Telangana-India
- o Swami Ramanand Teerth Marathwada University, Nanded-Maraharshtra
- o Gurunanak Dev University, Amritsir-Punjab

SERVED IN NATIONAL COMMITTEES

- Member of BoA (Board of Appointment)
- o Rani Channamma University, Belagavi
- o Karnataka University, Dharwad
- o Davanagere University, Davanagere
- o Guru Ghasidas Vishwavidyalaya, Bilaspur
- o Advisor to UPSC New Delhi
- o Assessor for NAAC, Bangalore
- o Advisor to KPSC, Bangalore

Academic Bodies

- □ Working as a Chairman of BOS /Doctoral Committee in Computer Science/Application, Department of Computer Science Rani Channamma University, Belagavi-Karnataka for the academic year 2023-24 and 2024-25.
- □ Working as a Doctoral committee member in Computer Science Shri Krishna Vijanagara University, Belllaray-Karnataka-India for the academic year 2023-24 and 2024-25.
- □ Worked as **Academic Council Member** of Rani Channamma University, Belagavi for next two academic year (2020-21 and 2021-22)
- Member of BOS in Computer Science and IT MGM University, Aurangabad Maharashtra
- □ Working as a Member of BOS /Doctoral Committee /Departmental Council in Computer Science/Application, Department of Computer Science Rani Channamma University, Belagavi-Karnataka
- □ Worked as a **Chairman Departmental Council** in Computer Science/Application, Department of Computer Science Rani Channamma University, Belagavi-Karnataka (2016-17 to 2019-20)
- □ Worked as a Chairman of BOS /Doctoral Committee in Computer Science/Application, Department of Computer Science Rani Channamma University, Belagavi-Karnataka (2017-18, 2018-19)
- □ Working as a **BOS Member in** Computer Science, Karnataka University, Dharawad, Dharwad for Next Two Academic Year (No.KU/Syndicate/BOS/PG/38/2019-20/1217 Dated 19-09-2019)
- □ Working as BOS Member, Mandya University, Mandya(MU/BOS-Computer Science/13/19-20 Dated 02-07-2019.
- Worked as External LIC Member for Gulbaraga University, Gulbarga 26-27th, March-2019

- □ Working as a **BOS Member in** Computer Science, Raja Lakmanagoud Science College (Autonomous), for UG Programme Under Rani Channamma University, Belagavi for the academic year 2016-17 to 2017-18
- □ Working as a **BOS Member** in computer Science, Davangere University, Davangeri (2017-18 on wards for 03 Years)
- Working as a BOE member in Computer Science, Gulbarga University, Kalburgi for the academic year 2016-17.
- □ Working as a **BOS Member** in Computer Science [UG and PG] of Government College(Autonomous) Mandya-Karnataka for the academic year 2015-16 and 2016-2017
- □ Worked as a BOE member in Computer Science, Gulbarga University, Kalburgi for the academic year 2015-16.
- □ Worked as a **BOS Member in** Computer Science, Lingaraj College (Autonomous), Under Rani Channamma University, Belagavi for the academic year 2014-15 to 2015-16
- □ Worked as a **BOE member** in Computer Science, Kuvempu University shankaragatta, Shivamogga for the academic year 2014-15.
- □ Worked as a **BOS Member in** Computer Science/Application, Department of Computer Science Sholapur University, Sholapur, Maharashtra from the academic year 2013-14 to 2014-15
- □ Worked as a **Academic Council Member** of Government College(Autonomous) Mandya-Karnataka from academic year 2009-10 to 2012-2013
- □ Worked as a **BOS Chairman in M.Sc.**[Computer Science] Government College(Autonomous) Mandya-Karnataka up to 03.09.2013. Now presently Member.
- □ Worked as a **BOS Member in "Network Security and Network Administration(CB)"** University of Mysore, Mysore for 2013-2016 (03 Yrs)
- □ Worked as a **BOS Member in M.Sc.**[Computer Science] JSS College(Autonomous), Ooty Road, Mysore for the two academic year 2010-11 and 2011-12
- □ Worked as a BOE Chairman M.Sc.[Information Technology], MCA Dept of IT, KSOU, Mysore for the academic year 2010-11 and 2011-12
- □ Working as a BOS Member in Computer Science[UG] Yuvaraja's College, Mysore for the academic year 2009-10 and 2010-11
- ☐ Working as a BOE Member M.Sc. in Computer Science, JSS College(Autonomous), Ooty Road, Mysore
- □ Worked as a Member BOS and BOE in Computer Science/Computer Application for B.Sc./BA/BBM/BCA at Government College (Autonomous) Mandya-Karnataka from 2009 to 03.09.2013.
- □ Worked as a BOE Member M.Sc. in Computer Science (I to IV Sem), Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.2006-2007, 2007-2008
- □ Worked as a BOE Member, Chairman in Computer Science / Applications at undergraduate level (B.A/B.Com./B.Sc.) Gulbarga University Gulbarga 2002-03, 2003-04.
- □ Worked as a BOE Member, in Computer Science/Applications at undergraduate level (B.C.A) Gulbarga University Gulbarga- 2004-2005.
- □ Worked as a BOE Chairman in Computer Science/Applications at undergraduate level (B.A/B.Com) Gulbarga University Gulbarga- 2004-2005
- □ Worked as a BOE Member in Computer Science/Applications at undergraduate level (B.A/B.Com) Gulbarga University Gulbarga- 2005-2006

OTHER ACADEMIC ACTIVITIES

- Working as Review Editor Frontiers in Big Data Medicine and Public Health
- Working as **Topic Editor** Frontiers in Big Data "Biometric Data Analysis: Applications and Future Trends in e-Security and e-Health
- Working as **Associate Editor**, International Journal on Artificial Intelligence and Applications (Associate Editors | Artificial Intelligence and Applications (bonviewpress.com)
- Working as Member Technical Committee Davanagere University, Davanagere.

- Working as Member Technical Committee Karanataka State Open University, Mysore.
- Working as Member Technical Committee Mandya University, Mandya.
- Working as a Member of Task Force Committee for the implementation of "NEP-2020", Rani Channamma University, Belagavi.
- ➤ Member of Subject wise Expert Committee (Computer Science) to Draft a model curriculum Contents for the Implementation of NEP-2020(Govt. Order ED 260 UNE 2019 (Part-1) Bangalore Dated 13.08.2021.

List of International Journal Publications

(Scopus Indexed/IEEE/Peer-Reviewed/UGC Care Listed)

- Shivanand Gornale, Abhijit Patil, Khang Wen Goh, Sathish Kumar, Kruthi R., "Fingerprint Image Fusion: A Cutting-edge Perspective on Gender Classification via Rotational Invariant Features", International Journal of Image, Graphics and Signal Processing(IJIGSP), Vol.16, No.4, pp. 42-55, 2024. DOI:10.5815/ijigsp.2024.04.04
- Shivanand Gornale, P Kamat, R Siddalingappa, S Kumar, Deep Learning Techniques for a Comprehensive Analysis of Fetal Biometric Parameters Across Trimesters. Transactions on Engineering and Computing Sciences - Vol. 12, No. 3 PP: 18-45. 2024 DOI:10.14738/tecs.123.16985.
- 3. Patil Gayatri, Palaiahnakote Shivakumara, Shivanand Gornale, Lopresti Daniel, P.Altered Handwritten Text Detection in Document Images Using Deep Learning. International Journal of Pattern Recognition and Artificial Intelligence-2024, https://doi.org/10.1142/s0218001424520062
- 4. Shivanand Gornale, Patil SS, Deo A. "A Systematic Review of Human Biofield Image analysis using Image Processing Techniques". Journal of the Oriental Institute. 2023 Jun;72(1).
- P Prakash, Shivanand Gornale, MS ShyamaSundar, R Siddalingappa, The Role of the National Assessment and Accreditation Council in Ensuring Quality Education in the Indian Education System: An Analysis of Its Accreditation Standards and Grading Practices. British Journal of Multidisciplinary and Advanced Studies, 2023 4(6), 1–18. https://doi.org/10.37745/bjmas.2022.0341
- 6. G Patil, P Shivakumara, Shivanand Gornale, U Pal, M Blumenstein, A new robust approach for altered handwritten text detection. Multimedia Tools Applications (2022). https://doi.org/10.1007/s11042-022-14242-8, Springer link (A new robust approach for altered handwritten text detection | SpringerLink)
- 7. Shivanand Gornale, G Patil, R Benne, "Document Image Forgery Detection Using RGB Color Channel", Transactions on Machine Learning and Artificial Intelligence Vol. 10, No. 5 Publication Date: October, 25, 2022, DOI:10.14738/tmlai.105.13126.
- 8. Shivanand Gornale, S Kumar, R Siddalingappa, A Mane, "Gender Classification Based on Online Signature Features using Machine Learning Techniques", International Journal of Intelligent Systems and Applications in Engineering, Vol. 10 Issue 2, PP: 260-268, SSN:2147-679921, IJISAE, 2022,
- 9. Shivanand Gornale, S Kumar, R Siddalingappa, PS Hiremath, "Survey on Handwritten Signature Biometric Data Analysis for Assessment of Neurological Disorder using Machine Learning Techniques", Transactions on Machine Learning and Artificial Intelligence Vol. 10, No. 2 Publication Date: 25th, April-2022, http://dx.doi.org/10.14738/tmlai.102.12210, Services for Science and Education United Kingdom
- Shivanand Gornale, Sathish Kumar "Offline Handwritten Signature Database based on Gender Annotation", 2022 Medeley Data , DOI: 10.17632/22wgmdppxz.1 https://data.mendeley.com/datasets/22wgmdppxz/1
- 11. Shivanand Gornale, S Kumar, PS Hiremath, "Handwritten Signature Biometric Data Analysis for Personality Prediction System Using Machine Learning Techniques", Transactions on Machine Learning and Artificial Intelligence Vol. 9, No. 5 Publication Date: October, 25, 2021 DOI:10.14738/tmlai.95.10808, Services for Science and Education United Kingdom

- 12. Shivanand Gornale, S Kumar, A Patil, PS Hiremath, "Behavioral Biometric Data Analysis for Gender Classification using Feature Fusion and Machine Learning", Frontiers in Robotics and Al, 2021 Frontiers: DO: 10.3389/frobt.2021.685966
- 13. Shivanand Gornale, PU Patravali, PS Hiremath, "Identification of region of interest for assessment of knee osteoarthritis in radiographic images", International Journal of Medical Engineering and Informatics, Volume, 13 Issue, 1, Pages, 64-74, Inderscience Publishers (IEL)-2021, https://doi.org/10.1504/IJMEI.2021.111866
- 14. Shivanand Gornale, PU Patravali, PS Hiremath, A Comprehensive Digital Knee X-ray Image Dataset for the Assessment of Osteoarthritis JSM Biomedical Imaging Data Pap 6(1): 1012 (2020) A Comprehensive Digital Knee X-ray Image Dataset for the Assessment of Osteoarthritis (jscimedcentral.com)
- 15. Shivanand Gornale, PU Patravali, PS Hiremath, "Automatic Detection and Classification of Knee Osteoarthritis Using Hu's Invariant Moments", Front. Robot. Al 7: 591827. doi: 10.3389/frobt,2020.
- 16. Shivanand Gornale, Pooja Patravali "Digital Knee X-ray Images", 2020 Mendeley Data, V1, doi: 10.17632/t9ndx37v5h.1 http://dx.doi.org/10.17632/t9ndx37v5h.1
- 17. Shivanand Gornale, A Patil, K Ramchandra, "Multimodal Biometrics Data Analysis for Gender Estimation Using Deep Learning", International Journal of Data Science and Analysis. Special Issue: Multimodal Biometric Data Analysis., Volume, 6, Issue, 2, Pages 64-68, 2020/5/20, http://www.sciencepublishinggroup.com/j/ijdsa doi: 10.11648/j.ijdsa.20200602.11 ISSN: 2575-1883 (Print); ISSN: 2575-1891 (Online)
- 18. Shivanand Gornale, PU Patravali, PS Hiremath, "A Comprehensive Digital Knee X-ray Image Dataset for the Assessment of Osteoarthritis", JSM Biomed Imaging Data Pap 6(1): 1012., October-2020, ISSN: 2476-2040
- 19. Shivanand Gornale, PU Patravali, PS Hiremath, "Early Detection of Osteoarthritis based on Cartilage Thickness in Knee X-ray Images", International Journal of Image, Graphics and Signal Processing(IJIGSP) ISSN: 2074-9074 (Print), ISSN: 2074-9082 (Online)PP.56-63, IJIGSP Vol. 11, No. 9, Sep. 2019 DOI: 10.5815/ijigsp.2019.09.06.
- 20. Shivanand Gornale, A Patil, R Kruthi "Multimodal Biometrics Data based Gender Classification Using Machine Vision", International Journal of Innovative Technology and Exploring Engineering(IJITEE), ISSN: 2278-3075, Volume-8 Issue-11, September 2019, Retrieval Number J96730881019/2019©BEIESP DOI: 10.35940/ijitee.J9673.0981119,https://www.ijitee.org/wpcontent/uploads/papers/v8i11/J96730881 019.pdf.
- 21. Shivanand Gornale, PU Patravali, PS Hiremath "Detection of Osteoarthritis in Knee Radiographic Images sing Artificial Neural Network", International Journal of Innovative Technology and Exploring Engineering(IJITEE), ISSN: 2278-3075, Volume-8 Issue-12, October-2019, Retrieval Number L30111081219/2019©BEIESP DOI: 10.35940/ijitee.L3011.1081219.
- 22. R Kruti, A Patil, Shivanand Gornale "Fusion of Features and Synthesis Classifiers for Gender Classification using Fingerprints", International Journal of Computer Sciences and Engineering, Vol. 07. Issue 05, PP: 526-533,2019, DOI: https://doi.org/10.26438/ijcse/v7i5.526533 | Available online at: www.ijcseonline.org
- 23. Shivanand Gornale, AK Babaleshwar, PL Yannawar, "Content Based Video Retrieval for Indian Traffic Signage's", International Journal of Computer Sciences and Engineering, Vol. 07. Issue 05, PP: 14-20, 2019, DOI: https://doi.org/10.26438/ijcse/v7i5.526533 | Available online at: www.ijcseonline.org
- 24. A Patil, R Kruthi, Shivanand Gornale "Analysis of Multi-modal Biometrics System for Gender Classification Using Face, Iris and Fingerprint Images", International Journal of Image, Graphics and Signal Processing (IJIGSP), Vol. 11, Issue-5, PP: 34-43, 2019 http://www.mecs-press.org/ijigsp/ijigsp-v11-n5/IJIGSP-V11-N5-4.pdf
- 25. Shivanand Gornale, AK Babaleshwar, PL Yannawar, "Analysis and Detection of Content based Video Retrieval", International Journal of Image, Graphics and Signal Processing (IJIGSP), Vol. 11, Issue-3, PP: 43-57, DOI:10.5815/ijigsp.2019.03.06, 2019.
- 26. Shivanand Gornale, PU Patravali, AM Uppin, PS Hiremath, "Study of Segmentation Techniques for Assessment of Osteoarthritis in Knee X-ray Images", International Journal of Image, Graphics

- and Signal Processing, 2019, 2, 48-57 Published Online February 2019 in MECS (http://www.mecspress.org/) DOI: 10.5815/ijigsp.2019.02.06.
- 27. R Kruti, A Patil, Shivanand Gornale "Fusion of Local Binary Pattern and Local Phase Quantization features set for Gender Classification using Fingerprints", International Journal of Computer Sciences and Engineering, Vol.-7, Issue-1, Jan 2019 E-ISSN: 2347-2693. PP: 22-29.
- 28. A Patil, R Kruti, Shivanand Gornale, "Wavelet and Local Binary Patterns(LBP) Features sets for Gender Identification using Palm prints", International Journal of Imaging Science and Engineering(IJISE), Published by International Technology Foundation of Research (ITFR) ISSN: 1934-9955 Vol. 10, Issue-2, June-2018 PP: 1-6.
- 29. Shivanand Gornale, AK Babaleshwar, PL Yannawar -"Detection and Classification of Signage's from Random Mobile Videos Using Local Binary Patterns", International Journal of Image, Graphics and Signal Processing(IJIGSP), Vol.10, No.2, pp. 52-59, 2018.DOI: 10.5815/ijigsp.2018.02.06
- 30. Shivanand Gornale, PU Patravali, KS Marathe, PS Hiremath "Determination of Osteoarthritis Using Histogram of Oriented Gradients and Multiclass SVM", International Journal of Image, Graphics and Signal Processing (IJIGSP), Vol.9, No.12, pp. 41-49, Dec-2017.DOI: 10.5815/ijigsp.2017.12.05.
- 31. Shivanand Gornale, M Basavanna, R Kruti "Fingerprint Based Gender Classification Using Local Binary Pattern", International Journal of Computational Intelligence Research ISSN 0973-1873 Volume 13, Number 2 (2017), pp. 261-271 © Research India Publications http://www.ripublication.com
- 32. Basavanna M, TN Govindaiah, Shivanand Gornale "Tumor Cell Identification In Medical Images Using Image Processing Techniques", Global Journal Of Advanced Engineering Technologies And Sciences, ISSN 2349-0292, PP: 13-17-3(10), Oct-2016.
- 33. A Patil, R Kruthi, Shivanand Gornale, "Statistical Features based Gender Identification using SVM". IJSRD || National Conference on Advances in Computing and Communications || October 2016
- 34. Shivanand Gornale, A Patil, C Veersheety "Fingerprint based Gender Identification using Discrete Wavelet Transform and Gabor Filters", International Journal of Computer Applications (0975 8887) Volume 152 No.4, PP-34-37, October-2016
- 35. Shivanand Gornale, PU Patravali, RR Manza "Detection of Osteoarthritis using Knee X -Ray Image Analyses: A Machine Vision based Approach", International Journal of Computer Applications (0975 8887) Volume 145 No.1, July 2016-DOI: 10.5120/ijca2016910544.
- 36. S Sukale, Shivanand Gornale, P Yannawar "Recognition of Isolated Marathi words from Side Pose for multi-pose Audio Visual Speech Recognition, ADBU-Journal of Engineering Technology (AJET), ISSN:2348-7305, PP: No. 1-7, Volume 5 Issue 1, June, 2016.
- 37. Shivanand Gornale, PU Patravali, RR Manza "A Survey on Exploration and Classification of Osteoarthritis Using Image Processing Techniques", International Journal of Scientific & Engineering Research, Volume 7, Issue 6, June-2016 ISSN 2229-5518 PP: 334-355
- 38. Shivanand Gornale, AC Nuthan "Randomized Passcode generation for Scan based hybrid symmetric cryptosystem", International Journal Of Advanced Studies In Computer Science And Engineering(IJASCSE) Volume 5, Issue 2, PP: 23-28, Feb-2016
- 39. Patil Dnyaneshwari, Manza Ramesh R, Shivanand Gornale "Clustering Based Cup to Disc Ratio Method for Diagnosis of Primary Glaucoma", International Journal of Health Sciences and Research, (www.ijhsr.org) ISSN: 2249-9571, Vol.6; Issue: 1; PP: 432-439 January 2016.
- 40. Shivanand Gornale, AC Nuthan "Randomized Passcode Generation For Triple-Stegging Using DWT And ECC" IJCSI International Journal of Computer Science Issues, Volume 12, Issue 6, November 2015 ISSN (Print): 1694-0814, ISSN (Online): 1694-0784, PP: 158-164.
- 41. Shivanand Gornale, M Hangarge, R Pardeshi, R Kruthi "Haralick Feature Descriptors for Gender Classification Using Fingerprints: A Machine Learning Approach", International Journal of Advanced Research in Computer Science and Software Engineering", Volume 5, Issue 9, September 2015 ISSN: 2277 128X, PP-72-78
- 42. Shivanand Gornale, AC Nuthan "Self Generative Passcode for Triple Stegging using Discrete Wavelet Transform(DWT) and Elliptic Curve Cryptography (ECC)" International Journal of Emerging Trends and Technology in Computer Science (IJETTCS) Volume 4, Issue 4, July-August 2015 ISSN 2278-6856(www.ijettcs.org)

- 43. Dnyashwari P, V Humbe, Shivanand Gornale "Development of Image De noising Technique using Wavelet Transform for Satellite Images", VNSGU International Journal of Science and Technology. Vol.4. No. 1, July, 2015, 157 161,ISSN: 0975-5446.
- 44. Shivanand Gornale, M Basavanna, R Kruthi "Gender Classification Using Fingerprints Based On Support Vector Machines (SVM) With 10-Cross Validation Technique", International Journal of Scientific & Engineering Research (ISSN 2229-5518) Volume 6, Issue 7, July 2015.
- 45. Basavanna M, Shivanand Gornale "Identification and Classification of flower images using color models", International Journal of Advanced Research in Computer Science and Software Engineering", Volume 5, Issue 6, June-2015, ISSN 2277 128X, PP: 1003-1007
- 46. Shivanand Gornale, M Basavanna, R Kruthi "Gender Classification Using Minutiae Extraction", International Journal of Advanced Research in Computer Science (IJARCS), ISSN 0976-5697, PP: 72-77, Volume 6, No. 1, January-February 2015.
- 47. M Basavanna, Shivanand Gornale "Skew Detection and Skew Correction in scanned Document Image using Principal Component Analysis" International Journal of Scientific & Engineering Research, Volume 6, Issue 1,PP:1414-1417 January ISSN 222-5518 IJSER © 2015. http://www.ijser.org
- 48. Shivanand Gornale "Fingerprint Based Gender Classification for Biometric Security: A State-Of-The-Art Technique", International Journal of Research in Science, Technology, Engineering & Mathematics ISSN (Print): 2328-3491, ISSN (Online): 2328-3580, ISSN (CD-ROM): 2328-3629, Dec-2014- Feb-2015. Vol.4 No. Issue- 3, PP: 39-49
- 49. Shivanand Gornale, R Kruthi "Fusion of Fingerprint and Age Biometric for Gender Classification Using Frequency and Texture Analysis" Signal & Image Processing: An International Journal (SIPIJ) Vol.5, No.6, December 2014. DOI: 10.5121/sipij.2014.5606, PP: 76-85, ISSN 0976-710X (online); 2229-3922(print)
- 50. Shivanand Gornale, CD Geetha, R Kruthi "Analysis of fingerprint image for gender classification using spatial and frequency domain analysis" American International Journal of Research in Science, Technology, Engineering & Mathematics (AIJRSTEM), ISSN (Print): 2328-3491, ISSN (Online): 2328-3580, ISSN (CD-ROM): 2328-3629. Issue 3, Volume 1, pp. 46-50, June-August, 2013.
- 51. AC Nuthan, MSN Kumar, GB Ravikant, Shivanand Shivanand "Development of Randomized Hybrid Crypto System" International Journal of Information Communication Technology and Management Academic City, Accra, Ghana February 2013 Vol- I Issue –I ISSN No. 2026-6839
- 52. Shivanand Gornale, Laxmikant "Performance analysis of Speaker Recognition System using Feature Extraction methods" VNSGU International Journal of Science & Technology, ISSN 0975-5446, Vol.2 Issue: 2, March-2012.
- 53. B Hiremath, Shivanand Gornale, S Halvi "DETERMINATION OF SLEEP STAGES FROM EEG DATA USING HYPNOGRAM PLOT" International Journal of Machine Intelligence ISSN: 0975-2927; E-ISSN: 0975-9166 Vol. 3, Issue 3, pp 126-129. Nov-2011
- 54. M Basavanna, Shivanand Gornale "Automatic Non-Horizontal Scene Text Recognition From a Document Image" International Journal of Machine Intelligence ISSN: 0975-2927; E-ISSN:0975-9166 Vol. 3, Issue 3, pp 164-167, Nov-2011
- 55. Magar G M, Shivanand Gornale, K.V. Kale "Multiwavelet Transformation for SAR image coding:" performance evaluation for Lossy compression. International Journal of Signal and Image Processing, ISSN: 0976-8882 & E-ISSN: 0976-8890, Volume 2, Issue 1, pp-26-35, Nov-2011
- 56. K V Kale and Shivanand Gornale "Exploiting Multiwavelet for Lossy Compression in SAR Imaging" International Journal of Computer Applications and Business Intelligence ISSN 0975-945X Vol. 01 Issue 04 oct-dec-2010 PP31-40.
- 57. Shivanand Gornale, Humbe V. Manza R, Kale K.V. "Fingerprint Image De-noising Using Multi-Resolution Analysis (MRA) through Stationary Wavelet Transform (SWT) Method" International Journal of Knowledge Engineering, ISSN: 0976–5816 & E-ISSN: 0976–5824, Volume 1, Issue 1, 2010.
- 58. Shivanand Gornale, V Humbe, Kale K V, Magar G M "Wavelet and Multiwavelet based Synthetic Aperture Radar (SAR) Image compression" VNSGU International Journal of Science and Technology, ISSN 0975-5446 Vol.2 Issue: 1 June-2010.
- 59. Shivanand Gornale, RR Manza, V Humbe, KV Kale "Performance Analysis of Bi-orthogonal Wavelet Filters for Lossy Fingerprint Image Compression" International Journal of Imaging Science and Engineering, Vol 2. April, 2007 ISSN 1934-9955, TIFR Signal Processing Society

- 60. Shivanand Gornale, VT Humbe, RR Manza, KV Kale "Fingerprint Image Compression using Retain Energy (RE) and Number of Zeros (NZ) Through Wavelet Packet (WP)" International Journal of Computer Science and Security ISSN: 1985-1533 Vol. No. 1 issue 2 PP: 35-42-2007.
- 61. V Humbe, Shivanand Gornale, R Manza, KV Kale "Mathematical Morphology Approach for Genuine Fingerprint Feature Extraction", International **Journal** of Computer Science and Security ISSN: 1985-1533 Volume No. 1 issue 2 PP: 53-59-2007.
- 62. A Shrivastava, M Shinde, SS Gornale, P Lawande- "An Approach Effect of an Exponential Distribution on different Medical images", International Journal of Computer Science and Network Security, ISSN: 1738-7906 VOL.7 No.9, PP 235-241 Sept-2007.
- 63. R.R Manza, Shivanand Gornale, Vikas Humbe, Jayant Singh, K. V. Kale "Frequency Domain Techniques and Image Data Compression" Skyline Business Journal, Spring 2006, UAE, PP: 56-62.

National Journals

- 64. KV Kale, RR Manza, Shivanand Gornale, V Humbe "Noisy and Noiseless Fingerprint Image Compression using Wavelet" IT Review Journal of Information Technology and Computer Science", Vol. 01, No. 01, PP 46-50, March-2005.
- 65. KV Kale, RR Manza, Shivanand Gornale, V Humbe "Role of IT in Rural areas for strengthening the Nation" IT Review Journal of Information Technology and Computer Science, Vol. 01, No. 01, PP 31-34, March-2005.

International Conference Proceedings

- 66. Shivanand Gornale, SS Patil, A Deo, S Kumar "Quantitative Analysis of Biofield Energy Imbalance Through Color Segmentation and Classification Using Machine Learning Techniques," 2024 IEEE 9th International Conference for Convergence in Technology (I2CT), Pune, India, 2024, pp. 1-5, doi: 10.1109/I2CT61223.2024.10543817.
- 67. A Roy, P Shivakumara, U Pal, CL Liu, Shivanand Gornale A New Lightweight Attention-Based Model for Emotion Recognition on Distorted Social Media Face Images. In: Lu, H., Blumenstein, M., Cho, SB., Liu, CL., Yagi, Y., Kamiya, T. (eds) **Pattern Recognition. ACPR 2023.** Lecture Notes in Computer Science, vol 14407. Springer, Cham. https://doi.org/10.1007/978-3-031-47637-2 19
- 68. S Kumar, Shivanand Gornale, A Patil, S Rashmi "Offline Handwritten Signature Analysis for Age Classification using Deep Features," 2023 4th International Conference for Emerging Technology (INCET), Belgaum, India, 2023, pp. 1-6, doi: 10.1109/INCET57972.2023.10170459.
- 69. R Benne, Shivanand Gornale, G Patil "A Numeral Script Identification from a Multi-lingual Printed Document Image", Proceedings of the First International Conference on Advances in Computer Vision and Artificial Intelligence Technologies (ACVAIT 2022), pp. 178–186, 2023. https://doi.org/10.2991/978-94-6463-196-8 16, 2023.
- 70. Shivanand Gornale, AC Nuthan, C Sumitha "Automated Nutrient Level Determination Using Machine Learning", Proceedings of the First International Conference on Advances in Computer Vision and Artificial Intelligence Technologies (ACVAIT 2022) pp. 701–710, 2023. https://doi.org/10.2991/978-94-6463-196-8 53, 2023
- 71. S Kumar, Shivanand Gornale, R Siddalingappa "Gender Classification from Behavioural Biometric Data using Convolutional Neural Network", Proceedings of the First International Conference on Advances in Computer Vision and Artificial Intelligence Technologies (ACVAIT 2022), pp. 646–659, 2023. https://doi.org/10.2991/978-94-6463-196-8 49, 2023.
- 72. G Patil, Shivanand Gornale, A Babaleshwar "A Machine Learning Based Approach for Image Quality Assessment of Forged Document Images" Proceedings of the First International Conference on Advances in Computer Vision and Artificial Intelligence Technologies (ACVAIT 2022), pp. 208–229, 2023. https://doi.org/10.2991/978-94-6463-196-8_18, 2023
- 73. Shivanand Gornale, PU Patravali, PS Hiremath Osteoarthritis Detection in Knee Radiographic Images using Multi resolution Wavelet Filters" 3rd Biennial International Conference on Recent Trends in Image Processing and Pattern Recognition(RTIP2R), Jan, 3-4th, Jan-2020, Organized by Department of Computer Science & IT Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-Maharashtra-India (Received Best Paper Presentation Award)
- 74. Shivanand Gornale, AK Babaleshwar, PL Yannawar Extraction of Key frame from Random Videos based on Discrete Cosine Transform", 3rd Biennial International Conference on **Recent Trends in Image Processing and Pattern Recognition(RTIP2R)**, Jan, 3-4th, Jan-2020, Organized by

- Department of Computer Science & IT Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-Maharashtra-India
- 75. Shivanand Gornale, PU Patravali, PS Hiremath "Cognitive informatics, computer modeling and cognitive science: assessment of knee osteoarthritis in radiographic images: a machine learning approach", 93-121, Academic Press-2020
- 76. Shivanand Gornale, A Patil, M Hangarge, R Pardesi Automatic Human Gender Identification Using Palmprint, Smart Computational Strategies: Theoretical and Practical Aspects, **Springer Singapore**, Online ISBN-978-981-13-6295-8, Print ISBN 978-981-13-6294-1, 22-03-2019.
- 77. Shivanand Gornale, A Patil, M Hangarge Binarized Statistical Image Feature Set for Palmprint based Gender Identification, 1st International Conference on Machine Learning, Image Processing, Network Security and Data Sciences (MIND-2019), Conference Proceedings, National Institute of Technology Kurukshetra, India, during March 3-4, 2019.
- 78. AC Nuthan, M.S. Naveen Kumar, Shivanand Gornale, "QR code based randomized hybrid video encryption", 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS), 1-2 Aug. 2017, Chennai India, DOI: 10.1109/ICECDS.2017.8390027 (IEEE Xplore: 21 June 2018)
- 79. Shivanand Gornale, A Patil, M Hangarge, R Pardesi "Automatic Human Gender Identification Using Palmprint", International Conference on Computational Strategies for Next Generation Technologies NEXTCOM-2017, Nov 25, 2017 CT Institute of Engineering, Management & Technology Jalandhar, Punjab, India
- 80. Shivanand Gornale, Pooja Patravalli, Ramesh Manza "Computer Assisted Analysis and Systematization of Knee Osteoarthritis using Digital X-ray Images", 2nd International Conference on Cognitive Knowledge Engineering (ICKE-2016), 22-24th Dec-2016, Aurangabad-Maharashtra-India. (Best Paper Award)
- 81. Shivanand Gornale, AC Nuthan "Discrete Wavelet Transform based randamized tripple stegging with Elliptic curve cryptography(ECC), Proceedings of 2nd International conference on recent trends in signal processing, Image processing and VLSI, Organized by Don Bosco Intitute of Technology, 15th and 16th May-2015, PP:779-785 @RPS 2015.
- 82. Shivanand Gornale, AC Nuthan, MSN Kumar, GB Ravikant "Development of Randomized Hybrid Cryptosystem using Public and Private key" Proceedings of International Conference on Engineering Research in Electronics Computer Science and Technology (ICERECT-12), PES Engineering College Mandya 21-22nd Dec-2012. Book of abstract Volume 248. PP:919-926.
- 83. KV Kale, SC Mehrotra, RR Manza Shivanand Gornale, V Humbe, "Lossless Image Data Compression through LU Decomposition" IEEE Sponsored International Conference on Advances in Computer Vision and Information Technology (IEEE-ACVIT-09) 16th 19th December, 2009, Aurangabad (MS)-India. PP: 20-25, ISBN: 978-93-80026-95-4, IK International Publishing House Pvt. Ltd©-2010.
- 84. V Humbe, KV Kale, RR Manza, Shivanand Gornale Fingerprint Image De-noising through Decimated and Un-decimated Wavelet Transforms (WT) -IEEE Sponsored International Conference Future Computer and Communication (ICFCC 2009) Kualal Lumpur, Malaysia 3-5th April-2009 ISBN: Print ISBN: 978-0-7695-3591 DOI: 10.1109/ICFCC.2009.101, INSPEC Accession Number: 10804573 (IEEE Xplore: 04-08-2009)
- 85. G Magar, Shivanand Gornale, V Humbe, R Manza, KV Kale "Comparative Analysis of Multiresolution Analysis (MRA) Techniques for Multiplicative Speckle Noise Reduction of Synthetic Aperture Radar (SAR) Image "Proceedings of International Conference on "Managing Next Generation Software Applications-08(MNGSA-2008) 05-06-December 2008 –Coimbatore- India PP: 1317-1322, ISBN 978-81-90787-0-0
- 86. G Magar, Shivanand Gornale, V Humbe, R Manza, KV Kale "Multi-Resolution Analysis (MRA) filtering Approach for Reduction of Multiplicative speckle Noise of Synthetic Aperture Radar (SAR) Image" Proceedings of International Conference on ADVANCED COMPUTING & COMMUNICATION TECHNOLOGIES" COCHIN, KERALA, INDIA, KERALA, PP-132-137, Vol.No.1. India 24 to 26 September 2008 sponsored by IEEE, DRDO, Mahatma Gandhi University, SCIR and CSU
- 87. Shivanand Gornale, G Magar, V Humbe, S Jamborkar "MRI Image Compression through Homogenous Wavelet Filters Banks: A Multiwavelets Approach", Proceedings of IEEE-International Conference on Advances in Computer Vision and Information Technology (IEEE-

- ACVIT-07) 28-30th November, 2007, Aurangabad (MS)-India. PP 1065-1075 ISBN 978-81-89866-74-7 © 2007.
- 88. Shivanand Gornale, G Magar, V Humbe, P Yannawar, R Manza, KV Kale, "Speckle Noise Reduction of Synthetic Aperture Radar (SAR) Image Using Multi-Resolution Technique" Proceedings of IEEE-International Conference on Advances in Computer Vision and Information Technology (IEEEACVIT-07) 28-30th November, 2007, Aurangabad (MS)-India PP 1400-1405 ISBN 978-81-89866-74-7 © 2007.
- 89. Shivanand Gornale, R Manza, Y Jayant, MP Dhotre, KV Kale "Multi-Resolution System for Audio Data Compression: A Wavelet Approach", Proceedings of IEEE-International Conference on Advances in Computer Vision and Information Technology 28-30th November, 2007, Aurangabad (MS)-India PP 1100-1108 ISBN 978-81-89866-74-7 © 2007.
- 90. R Manza, Y Jayanta, MP Dhore, DKV Kale, Shivanand Gornale "Improving Micro array spots for Gene Determination using Morphological Technique", Proceedings of IEEE-International Conference on Advances in Computer Vision and Information Technology (IEEE-ACVIT-07) 28-30th November, 2007, Aurangabad (MS)-India PP 847-853 ISBN 978-81-89866-74-7 © 2007.
- 91. Manoj Devare, Shivanand Gornale -"Role of Markovain Queuing Discipline in Congestion Control in Homogeneous and Heterogeneous Network System", Proceedings of International Conference on Sysmetics, Cybernetics, Informatics ICSCI-2007-Hyderabad-India from 03rd –7th Jan-2007-(Received Best Paper Award).
- 92. V Humbe, Sagar Jambhorkar, R Manza, KV Kale, Shivanand Gornale, "Evaluation and Selection of Wavelet Filters for De-Noising Medical Images Using Stationary Wavelet Transform (SWT) ", Proceedings of International Conference on Systemic, Cybernetics, Informatics ICSCI-2007-Hyderabad-India from 03rd –7th Jan-2007
- 93. Shivanand Gornale, VT Humbe, RR Manza, KV Kale "Fingerprint Image Compression Using Retain Energy (RE) and Number of Zeros (NZ): A Multiwavelets Approach", International Conference on Information Communication Technology (IICT, 2007), July 22-24, 2007 Dehara Dun-India.
- 94. V Humbe, R Manza, KV Kale "Mathematical Morphology Approach for Genuine Fingerprint Feature Extraction", International Conference on Information Communication Technology (IICT, 2007), July 22-24, 2007 Dehara Dun-India.
- 95. Shivanand Gornale, VT Humbe, SS Jambhorkar, P Yannawar, RR Manza, KV Kale "Multi-Resolution system for MRI (Magnetic Resonance Imaging) image Compression: A Heterogeneous Wavelet Filters Approach". IEEE Proceedings of CGiV07-4th International Conference Computer Graphics, Imaging and Visualization (CGIV-07) 14, 15 17 August 2007, PP. 495-500, Bangkok, Thailand,
- 96. Shivanand Gornale, Vikas Humbe, Ganesh Magar, Ramesh Manza, Shivanand Gornale, K.V. Kale "Orthogonal and Bi-orthogonal Wavelet Transforms for Fingerprint Image De-nosing through Undecimated Wavelet Transform", Abstract Published in Book of Abstract of CGiV07-4th International Conference Computer Graphics, Imaging and Visualization(CGIV-07) 14, 15 17 August 2007, Bangkok, Thailand,
- 97. Shivanand Gornale, Ganesh Magar, V Humbe, Ramesh Manza, Kale K V "De-noising of Synthetic Aperture Radar (SAR) IMAGE: A Multi-resolution Analysis (MRA) approach", IEEE INDICON-2007-Banglore-India.
- 98. S. S. Jhamborkar, R. J, Ramteke, Shivanand Gornale, K.V. Kale "Effect of Change in Origin of structuring Element on Fingerprint Image Segmentation and Enhancement: A Morphological approach", IEEE INDICON-2007-Banglore-India
- 99. Shivanand Gornale, RR Manza, KKV Humbe Vikas "Quality Measures of Image Data Compression in Frequency Domain", Proceedings of International Conference on Systematics, Cybernetics, Informatics ICSCI-2006-Hyderabad-India from 4th –8th Jan-2006.
- 100. KV Kale, RR Manza, Shivanand Gornale, PD Deshmukh, V Humbe "SWT based Composite Method for Fingerprint Image Enhancement", Proceedings of IEEE-ISSPIT2006, page(s): 162-167, Vancouver, BC, ISBN: 0-7803-9753-3 INSPEC Accession Number: 9387896, August, 2006

- 101. SS Jambhorkar, RR Manza, Shivanand Gomale, KV Kale "A Novel Approach for Segmentation of Good Normal and Bad Quality Fingerprint Image International IEEE-TENCON 14th -17th , November 2006, HONG-KONG.
- 102. Magar Ganesh, K V Kale and Shivanand Gornale "Synthetic Aperture Radar (SAR) Image Compression Through Wavelet(W), Wavelet Packet (WP)" Proceedings of IEEE International Conference on Signal and Image Processing (IEEE-ICSIP) 7th 9th Dec-2006, Hubli-India, pp 103-106, ISBN10:0230-63003-0, ISBN-13:978-0230-63003-1.
- 103. Shivanand Gornale, Vikas Humbe, S Jambhorkar, R Manza, KV Kale "Noise Removal of Medical Images through Decimated and Un-decimated Wavelet Transforms", Proceedings IEEE-International Conference on Signal and Image Processing (IEEE-ICSIP) 7th 9th Dec-2006, Hubli-India. pp 402-406, ISBN10:0230-63003-0, ISBN-13:978-0230-63003-1.
- 104. Shivanand Gornale, S Jambhorkar, KV Kale "An Adaptive Algorithm for Segmentation of Low Quality Fingerprint Image" Proceedings of IEEE-International Conference on Signal and Image Processing (IEEE-ICSIP) 7th 9th Dec-2006, Hubli India pp 826-829. ISBN10:0230-63003-0, ISBN-13:978-0230-63003-1.
- 105. \$ \$ Jambhorkar, \$hivanand Gornale, VT Humbe, RR Manza, KV Kale "Uneven Background Extraction and \$egmentation of Good, Normal and Bad Quality Fingerprint Images", Proceedings of 14th IEEE International Conference on Advanced and Computing Communications (ADCOM2006) 20th -23rd December 2006, National Institute of Technology Suratkal, Manglore-India. Volume, Issue, 20-23 Dec. 2006 Page(s):222 225., INSPEC Accession Number: 9703693, DOI: 10.1109/ADCOM.2006.4289887 (IEEE Xplore: 13 August 2007).
- 106. Ramesh Manza, Shivanand Gornale, V Humbe, KV Kale "Noisy and Noiseless Fingerprint Image Compression using Wavelet Packet" Proceedings of International Conference on Computer Cognition & Recognition (ICCR-2005) organized by University of Mysore -India from 22-23rd Dec-2005.
- 107. Shivanand Gornale, K V Kale, Ramesh Manza Vikas Humbe "Role of Information Technology in Enhancing Socio-Economic Developments" Proceedings of International Conference on ICT in Education and Development organized by AISECT Bhopal (M.P) India from December 16-17-18, 2004.

National Conference Proceedings

- 108. Shivanand Gornale, A Patil, C Veersheety "Fingerprint based Gender identification Using Discrete Wavelet Transform (DWT) and Gabor Filters", Book of Abstract of UGC sponsored National conference on "Digital Image Processing and Pattern Recognition" held on 2nd and 3rd April-2016, at Karnataka Commerce College, Bidar, Dist Bidar-Karnataka.
- 109. Ganesh Magar, Shivanand Gornale, V Humbe, Pravin Yannavar, Ramesh Manza, KV Kale "Application of Multi-wavelet Techniques in SAR Imaging: A Case Study for Speckle Noise Reduction" in proceedings. National conference. On Recent Trends in Computer Application, PP. 155-158, February 17-18 2010, Aurangabad. ISBN: 978-81-906858-4-9.
- 110. Ganesh Magar, Shivanand Gornale, V Humbe, R Manza, KV Kale "Application of Multiresolution Technique for SAR Image Compression" Proceedings of UGC Sponsored National Conference on Recent Trends in Information Technology (RTIT-2009) 4-5th Sept, 2009 Government. College, Mandya-KS ISBN 978-93-80026-82-4, PP No 107-117.
- 111. Shivanand Gornale et. Al. "Role of Information Technology in Technical Education for Socio-Economic Development: A perspective", XII ISTE Convention JSPM Wagoli Campus Pune, Maharashtra India-11-12th, Jan, 2008.
- 112. Shivanand Gornale, et.al. "Performance Analysis of Edge Detection Methods for Medical Images", Proceedings of National Conference on Advancement in Information Technology and Internet Security, SIBAR Pune 4-5 Jan, 2008. ISBN 10:81-840-27-5, 13:978-81-8404-427-0, PP 27-36
- 113. Shivanand Gornale et.al "Fingerprint Image Enhancement Through Fuzzy Image Processing-An Approach", Proceedings of National Conference on Emerging Trends in Information Technology, Indore under TEQIP 18th -20th Dec, 2008 PP 194-198

- 114. "Probability Density Function by Exponential Distribution on Fingerprint Images", Proceedings of National Conference on Emerging Trends in Information Technology, Indore under TEQIP 18th 20th Dec, 2008 PP 288-291
- 115. "Multi Scale Traffic Optimization and Congestion Control Using Smart Router: Heuristic Approach" National Conference On Smart Communication Technologies And Industrial Informatics (SCTII-2007) February 3 4, 2007, NIT, Roorkela-India
- 116. "Noise Detection and Noise Removal from Medical image for Medical Imaging", National Conference on Signal Processing and Automation-2007", (NCSPA-07) Dr. D. Y. Patil College of Engineering, Pune (Maharashtra)-India.
- 117. "Sharpening of Device Independent Bitmap(DIB): A Digital Image Processing Approach", Proceedings of National Conference on Emerging Trends in information Technology (eIT2006), 29th-30th September, 2006, VIIT Baramati(MS)-India.
- 118. "Computer Human Interaction: A bionics Approach", Proceedings of National Conference on Emerging Trends in information Technology (eIT2006), 29th-30th September, 2006, VIIT Baramati (MS)-India.
- 119. "Applications of Digital Image Processing in Medical Image Enhancement", Proceedings of National Conference on Emerging Trends in information Technology (eIT2006), 29th-30th September, 2006, VIIT Baramati(MS)-India.
- 120. "Biometric Fingerprint Recognition An Approach Towards Secure World, ", Proceedings of National Conference on Emerging Trends in information Technology (eIT2006), 29th-30th September, 2006, VIIT Baramati(MS)-India.
- 121. "Use Of Optical Recognition Technology For Biometrics Applications", Proceedings of National Conference on Emerging Trends in information Technology (eIT2006), 29th-30th September, 2006, VIIT Baramati(MS)-India.
- 122. "Web Information System And Its Implications", Proceedings of National Conference on Emerging Trends in information Technology (eIT2006), 29th-30th September, 2006, VIIT, Baramati(MS)-India
- 123. K V Kale, Ramesh Manza and Shivannad Gornale "Image De-noising by using Gradient operators before compression to increase the compression ratio" National Conference on Advances in Information communication Technology (AICT) organized by B. P. Arts, S.M.A Science and K. K. C. Commerce College, Chalisgoan MS, India from 11-12 Feb-2005.
- 124. K V Kale, Ramesh Manza and Shivanand Gornale "Higher Education through e-Learning" National Conference: e-Learning Challenges and Opportunities in the Indian context Organized by Computer Society of India (CSI) and BBCIT Hyderabad (A.P) India on 29-10-2004 to 30-10-2004.
- 125. Shivanand Gornale, RR Manza, KKV Humbe Vikas "Performance Analysis of Wavelets to Multi-Wavelets for noisy image Compression" National Conference on Geometry, Analysis, Fluid Mechanics and Computer Applications" Organized by the Dept. of Studies in Mathematics and Computer Science, Kuvempu University, Shankaraghatta Karnataka, India on 9th, 10th and 11th Dec-2004.

PATENTS:

Shivakumara P and Shivanand Gornale- One PATENT is published in OFFICIAL JOURNAL OF THE PATENT OFFICE entitled of the invention: "A Novel Model for State and National Ethnicity Identification using Handwriting Analysis" (Application No.202241042256 A) ISSUE NO. 33/2022 FRIDAY Publication Date: 19/08/2022.

DATABASE PUBLISHED:

- Patil, Gayatri; Gornale, Dr Shivanand; Palaiahnakote, Shivakumara; Pal, Umapada; Blumenstein, Michael (2023), "Forged Handwritten Document Database", Mendeley Data, V1, doi: 10.17632/5bmyz97y7f.1 (Forged Handwritten Document Database Mendeley Data)
- ❖ Kumar, Sathish; Gornale, Dr Shivanand (2023), "Offline Handwritten Signature Database based on Age Annotation (OHSDA)", Mendeley Data, V1, doi: 10.17632/c5mfhr2xcz.1

- ❖ (Offline Handwritten Signature Database based on Age Annotation (OHSDA) Mendeley Data)
- ❖ Kumar, Sathish; Gornale, Shivanand (2022), "Offline Handwritten Signature Database based on Gender Annotation", Mendeley Data, V1, doi: 10.17632/22wgmdppxz.1 (Offline Handwritten Signature Database based on Gender Annotation - Mendeley Data)
- ❖ Gornale, Shivanand; Patravali, Pooja (2020), "Digital Knee X-ray Images", Mendeley Data, V1, doi: 10.17632/t9ndx37v5h.1 (Digital Knee X-ray Images Mendeley Data)

BOOKS

- 1. Editor, e-Proceedings of First National Conference on "Emerging Trends in Information Technology (eIT2007), 29th -30th September, 2006, VIIT, Baramati (MS)-India.
- 2. Editor, Proceedings of Second National Conference on "Emerging Trends in Information Technology (eIT2007), 29th -30th September, 2007, VIIT, Baramati (MS)-India: ISBN: 978-81-89866-63-1 IK International Publisher, New Delhi-India.
- 3. Editor, Proceedings of UGC Sponsored National Conference on "Recent Trends in Information Technology (RTIT-2009), 4th -5th September, 2009, Government. College, Mandya (Autonomous), Karnataka (India) ISBN 978-93-80026- 82-4, IK International Publisher, New Delhi-India.
- 4. Editor Special Issue on Digital Image Processing and Pattern Recognition (DIPPR-2011) 3-5th Nov-2011, International Journal of Machine Intelligence ISSN: 0975-2927; E-ISSN:0975-9166.
- 5. **S. Gornale, Basavanna M,** "Web Programming for Beginners", ISBN: 978-93-5213-363-5, Shroff Publisher & Distributors PVT Ltd, Mumbai-2016
- 6. **S. S Gornale, Basavanna M** "System Analysis and Design: Theory and Applications", ISBN: 978-93-85909-07-8, IK International Publisher, New Delhi-India.-2016
- 7. **S.S. Gornale**, "Multi-resolution Analysis for Image Compression", ISBN: 978-3-659-92570-2, Lambert Academic Publishing, USA-2016.
- 8. **S. S Gornale and Pooja U.Patravali**, "Medical Imaging in Clinical Applications: Algorithmic and Computer Based Approaches", Book Chapter in **Engineering & Technology: Latest Progress (ET)**. Meta Research Press, ISBN 978-81-932850-2-2, New Delhi-2017.
- Shivanand S. Gornale, Pooja U. Patravali, Prakash S. Hiremath, "Assessment of Osteoarthritis in Radiographic Images: A Machine Learning Approach", Book Chapter-Cognitive Informatics, Computer Modeling, and Cognitive Science, Academic Press, https://doi.org/10.1016/B978-0-12-819443-0.00006-4, Copyright © 2020 Elsevier Inc. Volume 1: Theory, Case Studies, and Applications, 2020, Pages 93-121.
- 10. **Nutan A C and S. S. Gornale,** "Fundamentals of Randomized Hybrid Cryptosystem-DESIGN, DEVELOP, DEPLOY", ISBN: 978-620-2-79478-7, LAP LAMBERT Academic Publishing. USA-23-08-2020.

SUBJECT TAUGHT IN UG/PG

- ❖ Information Technology & Programming Methodology (ITPM).
- System Analysis and Design (SAD),
- ❖ Analysis of Design and algorithms(ADA),
- Software Project Management and Information Technology (SPM&IT),
- Programming in C and Data Structure,
- Operating Systems (OS),
- Microprocessor and its Architecture,
- ❖ Web Programming,
- Software Engineering,
- Database Management Systems
- Digital Image Processing, etc.

ROLE AND RESPONSIBILITIES:

As Deputy Registrar (Evaluation), Rani Channamma University, Belagavi, key role to implement the Online Examination Activity-OASIS under which, Admission Process, Examination Application form/Admission Card, Question paper indent generation, Student appearing list, bundle dispatch statement college wise QP indent, Internal Assessment and practical marks entry, Theory Absent entry,

Result statement and ledger to the colleges, Revaluation and re-totaling applications are to be incorporated. And also key role to have teachers database of RCU, Belagavi.

- Actively engaged in the various committees in the University Campus like:
 - Member of Local Inquiry Committee(LIC),
 - Member of Cultural activities etc.
 - Member of IQAC and NAAC committee
 - Member of Admission Committee
 - Member of Staff Approval (Affiliated to RCU, Belagavi)
 - Member of Advisory Board for "Computerization of Examination System" of RCU Examination Branch
 - Chairman, Technical Committee, Rani Channamma University, Belagavi.
 - Member of the Cultural Activities
 - Member of Planning and Evaluation Committee.
- ➤ Controller of Examinations (COE) of Autonomous College from 01-04-2009 to 03.09.2013 in Government College, (Autonomous), Mandya.
- > HOD of Computer Science Government College Mandya, VIIT Baramati, CB College Bhalki.
- ➤ Convener for Campus Network and Computerization of Examination System, Government College Mandya (worth of Rs7 lakhs).
- ➤ Developed the department with high tech Infrastructure established in the C.B. College, Bhalki, VIIT Baramati-Maharashtra and Government College [Autonomous], Mandya.
- Initiation to start the B.C.A and M.Sc. [Computer Science] Courses in the Government College [Autonomous], Mandya.
- ➤ Key role in getting UGC Fund to Start Career Oriented Programme (COP) in Computer Networking under Science stream in Government College [Autonomous], Mandya (worthRs10 Lakhs.)
- > Initiative taken to start certificate courses in computer science for both students and teachers.
- ➤ Key role to implement the CBCS pattern for PG courses in the College.
- Actively engaged in the various committees in the College like Research and Development Committee, Planning and Evaluation Committee, Admission Committee etc.

PLANS FOR THE NEXT FIVE YEARS:

- Adopting and offering good advancement potential in academics, research and development among the students.
- Preparing the course notes/study material and which is made available through intra web support, which implies enhancing connectivity, intra web server and browsing facilities in the campus.
- > Creating awareness among the students for research bent of mind to establish a strong research culture in the department.
- > Initiation to start Integrated, Certificate and Diploma courses in the department.
- Putting effort for overall development of the students like their personality development, Communication Skill etc.
- > Planning to visit Infosys and Wipro campuses to provide industrial touch to the students.
- Conducting Seminar conferences and special lectures in the department.
- Engaging some special classes for preparation of Competitive exams like NET and SET.
- ➤ Giving training to the Teaching and Nonteaching faculty members and also Non Computer students to strengthen the Knowledge in the Computer Science and Information Technology.
- Initiating ICT awareness programmes to rural masses.
- > IT Awareness programmes for school children of rural background.
- Office automation-towards the paperless work
 - Online student grievance system
 - Student exam results/academic status through mobile SMS
 - Online question paper transmission / delivery
 - Online Convocation registration.

REFERENCES

Professor Dr. K. V. Kale,

Ph.D. FIETE, Member IEEE, IEEE-SA Professor of Computer Science Vice Chancellor, Dr. Babasaheb Ambedkar Technological University (https://dbatu.ac.in/), Lonere, Maharashtra, India. kvkale91@gmail.com, vc@dbatu.ac.in, Mobile No. 9422203089

Professor Dr. P. S Hiremath

M.Sc. Ph.D. Senior Professor of Computer Science KLE Tech. University, Hubli, Karnataka, India Mobile. No.09480226698 Professor Dr. Sharanabasappa V Halse

M. Sc., Ph.D., Professor of Electronics Vice Chancellor, Karnataka State Open University, Mysore, Karnataka, India Mobile No. 9972083580

Professor Dr. M Ramachandra Gowda

M.Com., Ph.D.
Professor of Commerce
Former, Vice Chancellor, Rani Channamma
University, Belagavi, Belagavi, Karnataka, India,
Mobile No. 9448008278

I hereby declare that the information provided is true to the best of my knowledge and belief.

Place: Belagavi

Date:

Signature (Dr. Shivanand S. Gornale)