### **Curriculum Vitae**

### Dr. Parashuram Bannigidad

**Professor and Chairman Department of Computer Science** Rani Channamma University, Vidyasangama NH-4, Belagavi-591156, Karnataka, INDIA Email ID: parashurambannigidad@gmail.com

Contact No. +91 9480162154



#### **PERSONAL DETAILS**

1	Name	Dr. Parashuram Bannigidad	
2	Father Name	Basavantappa	
3	Mother Name	Kalavva	
4	Date of Birth and Place	01-06-1972 Shirol	
5	Marital Status	Married	
6	Gender	Male	
9	Nationality	Indian	
10	Permanent Address	H.NO. 2-909/56/84, 2ND PHASE, 1ST CROSS,	
		VEERENDRA PATIL LAYOUT, SEDAM ROAD,	
		KALABURGI- 585105, KARNATAKA, INDIA	
11	Office Address	The Chairman	
		Dept. Of Computer Science	
		Rani Channamma University	
		Belagavi-591156	
12	Email ID	parashurambannigidad@gmail.com	
13	Contact No	+91 9480162154	

#### EDUCATION DETAILS: M.Sc., M.Phil., Ph.D., PGDCA

Degree	University/Board	Year
Ph.D. in Computer Science	Gulbarga University,Gulbarga	2012
M.Phil. in Computer Science	Alagappa University	2006
M.Sc. in Information Technology	Karnataka State Open University, Mysore	2003
PGDCA	Gulbarga University, Gulbarga	2002

#### **SARVICE DETAILS**

Name of University/ College / Institute	Designation	Status	Pay Scale / Consolidated	From	То
Government College, Gulbarga	Assistant Professor	Permanent	15600-39100	28-12-2007	03-09-2013
Rani Channamma University,Belgavi	Assistant Professor	Permanent	15600-39100	04-09-2013	27-12-2020
Rani Channamma University, Belagavi	Associate Professor	Permanent	131400-217100	28-12-2020	27-12-2023
Rani Channamma University, Belagavi	Professor	Permanent	144200-218200	28-12-2023	Till date

#### **RESEARCH AREA**

Digital Image Processing Pattern Recognition

Document Image Analysis Data Mining

Nano Technology Medical and Bio-Medical Applications

#### **RESEARCH FUNDING**

Title of the Project	Funding Agency	Period	Amount (In Lakhs)
Seed money to young Scientist for research	VGST, Govt. of Karnataka, Dept. of IT, BT, and Science and Technology	09.02.2012 TO 31.03.2013	4.00
Bacterial Cell Image Analysis using Digital Image Processing Technique	UGC-SWRO Minor Research Project	10.02.2011 TO 08.10.2012	1.45
Infrastructural development and research (K-FIST Level-I)	Karnataka Fund for Improvement of Science and Technology Infrastructure (KFIST), VGST, Govt. of Karnataka, Dept. of IT, BT, and Science and Technology	15.02.2012 TO 31.03.2013	20.00
Minor Research Project "A Study of Aluminium Nanoparticle Image Analysis using Digital Image Processing Techniques"	Rani Channamma University, Belagavi	04.09.2017 TO 05.12.2018	0.625
Minor Research Project	Rani Channamma University, Belagavi	01.06.2020 TO 31.05.2021	0.75
Minor Research Project Entitled "Digitization, Restoration and Classification of Historical Kannada Handwritten Manuscripts"	Rani Channamma University, Belagavi	13.02.2025 TO 13.02.2026	1.00

#### **RESEARCH GUIDANCE**

Ph.D. Degree awarded : 04 Nos.Presently working : 04 Nos.

➤ Project reports completed : >120 Nos. (M.Sc. and MCA)

#### **RESEARCH PUBLICATIONS**

Total No. of Publications - 87

• International Journals - 51

•	International Conferences	- 13
•	National Conferences	- 05
•	Book Chapters	- 17
•	Book	- 01

#### **INDEXING AND CITATIONS**

•	SCIMAGOJR	- 03
•	SCOPUS	- 24
•	DBLP	- 08
•	IEEE Digital Library	- 03
•	SPRINGER Book Chapters	- 14
•	Proceedings of SPIE	-01
•	Elsevier and SSRN	-01

#### **Google scholar Citations:**

•	Citations	- 737
•	h-index	- 14
•	i10 index	- 24

#### **Researchgate Citations**

•	Citations	- 454
•	Total Research Interest	- 433.7
•	Recommendations	- 21
•	Reads	- 246,832

#### **Academia Citations**

• Citations - 450

#### International Journals

- 1. "Automatic Classification of Microscopic Bacterial Cell Images", International Journal on Engineering and Technology, (IJENGG), Vol.2, No.4, Dec. 2009, pp.09-15. ISSN: 0974-5246
- 2. "Automated Identification and Classification of Rotavirus-A Particles in Digital Microscopic Images", IJCA Special Issue on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), 2010, Vol.2, pp.16-20, ISBN:978-93-80746-64-7 IF:0.835
- 3. "Automated Identification and Classification of White Blood Cells (Leukocytes) in Digital Microscopic Images", IJCA Special Issue on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), 2010, Vol.2, pp.59-63. 8 ISBN: 978-93-80746-65-4, IF: 0.835.
- 4. "Automatic Identification and Classification of Bacilli Bacterial Cell Growth" Phases, IJCA Special Issue on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), 2010, Vol.1 (2), pp.48-52. ISSN: 0975-887, IF: 0.835.
- 5. "Digital Image Analysis of Bacilli Bacterial Cell Growth Phases", Journal of Computational Intelligence in Bioinformatics (JCIB), ISSN: 0973-385X Vol. 3 No. 2 (2010) pp. 137–145. ISSN: 0973-385X.(3-19896)
- 6. "Automated Gram-staining Characterization of Bacterial Cells using Color and Cell Wall Properties ", Int'l. J. on Biomedical Engineering and Technology (IJBET), Inderscience Publishers Ltd. USA. 2011, Vol. 7, No.3, pp. 257-265, ISSN: 1752-6426, IF. 8.15.(2-16456)

- 7. Identification and classification of Cocci bacterial cells using digital Microscopic images", Int'l. J. on Computational Biology and Drug Design (IJCBDD), Inderscience Publishers Ltd. USA, 2011, Vol. 4, No. 3, pp. 262-273, 2011, ISSN: 1756-0764, IF. 4.03.(2-16563)
- 8. Automatic Classification of Bacilli Bacterial Cells in Digital Microscopic Images using Active Contour Model, Int'l. J. of Advances in Science and Technology (IJAST), Vol. 1. No.5, pp.40-50, 2010. ISSN: 2229-5216.
- 9. Automatic Identification and Classification of Bacterial Cells, Int'l J. of Computational Intelligence Research (IJCIR), Vol.7, Number 1 (2011), pp.25-34. ISSN: 0973-1873.(2-16568)
- 10. Digital Microscopic Image Analysis of Virus Particles, International Journal of Machine Intelligence (IJMI), Volume 3, Issue 4, pp. 180-184 (2011) (ISSN: 0975-2927 & E-ISSN: 0975-9166, ICV: 4.45).
- 11. Spiral Bacterial Cell Image Analysis using Active Contour Method, International Journal of Computer Applications (IJCA), Vol. 37, No. 8, pp.5-9, 2012. (ISSN: 0975-8887 IF 0.883).
- 12. Identification of Flagellated or Fimbriated Bacterial Cells using Digital Image Processing Techniques, Journal of Computer Applications (IJCA), Vol. 59, No. 12, pp.12-16, 2012. (ISSN: 0975-8887 IF 0.883).
- 13. Bacterial Cell Growth Analysis and Cell Division Time Determination using Fuzzy Inference System, International Journal of Computers and Technology, Volume 4, No. 2, 2013, pp. 225-233. (ISSN: 2277-3061 IF 1.043).
- 14. An improved Automated Method for identification of Bacterial Cell Morphological Characteristics, Int'l. J. on Advanced Trends in Computer Science and Engineering (ICACSE 2013), Vol. 4, No.2, 2013, pp.11-16. (ISSN 2278-3091).
- 15. Analysis of Flagellar Movements of Bacterial Cells using Digital Image Processing Techniques. International Journal of Advanced Research in Computer Science, Volume 5, No. 8, Nov-Dec. 2014, pp. 181-185. ISSN: 0976 5697, IF: 3.74.
- 16. Effect of Time on Anodized Al2O3 Nanopore FESEM Images using Digital Image Processing Techniques: A Study on Computational Chemistry, International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), Vol. 4, issue 3, 2015, pp. 15-23. ISSN 2278-6856. IF: 4.24.
- 17. Influence of Anodizing Time on Porosity of Nanopore Structures Grown on Flexible TLC Aluminium Films and Analysis of Images using MATLAB Software, VBRI, Advanced materials letters, Adv. Mater. Lett. 2016, 7(1), pp. 71-77 IF: 1.90.
- 18. "Restoration of degraded non uniformly illuminated historical Kannada handwritten document images", International Journal of Computer Engineering and Applications (IJCEA), Vol.12, pp.1-13, 2018, ISSN. 23213469.
- "A hybrid approach for digital fundus images using image enhancement techniques", International Journal of Computer Engineering and Applications (IJCEA), Vol.12, pp.122, 2018, ISSN. 23213469.
- 20. "Effect of concentration and temperature on aluminium oxide nanopore FESEM images", International Journal of Computer Engineering and Applications (IJCEA), Vol.12, pp.222-229, ISSN. 23213469, Jan 2018
- 21. "Identification and Classification of Historical Kannada Handwritten Document Images using GLCM Features", International Journal of Advanced Research in Computer Science, Vol.9, pp.1-8, 2018, ISSN. 09765697
- 22. "A Multistage Approach for Exudates Detection in Fundus Images Using Texture Features with K-NN Classifier", International Journal of Advanced Research in Computer Science, Vol.9, pp.755-759, 2018, ISSN. 09765697
- 23. "Effect of Voltage on Aluminium Nanopore Images using Digital Image Processing Techniques", Journal of Nanoscience Nanoengineering and Applications, vol.8, issue.3, pp. 8-14, Sept 2018
- 24. "Measurement of Physical Properties of Anodized Al<sub>2</sub>O<sub>3</sub> FESEM Images", International journal of computer application, vol.1, pp.8-12, 2018.

- 25. "Identification and classification of historical Kannada handwritten document images using LBP features", International Journal of Intelligent Systems Design and Computing (Inderscience Publishers), Vol.2, Issue.2, pp.176 188, 2018.
- "Exudates Detection in Digital Fundus Images Using GLCM Features With SVM Classifier", International Journal of Modern Electronics and Communication Engineering (IJMECE), Volume No.6, Issue No.6, November, 2018, pp.184-189.
- 27. "Historical Kannada Handwritten Character Recognition using K-Nearest Neighbour Technique", Journal of Artificial Intelligence Research and Advances, Volume 6 Issue 1 April 2019, pp. 23-29.
- 28. "Age-Type Identification and Classification of Historical Kannada Handwritten Scripts using Line Segmentation with HOG feature Descriptors", World Scientific News, 123, April 2019, pp.23-35.
- 29. "Identification and Classification of Historical Kannada Handwritten Scripts based on their Age-Type using Line Segmentation with GLCM features", International Journal of Computer Sciences and Engineering, vol.7, issue.3, March 2019, pp.754-763.
- 30. "Digitization and Recognition of Historical Kannada Handwritten Manuscripts using Text Line Segmentation with LBP Features", Journal of Emerging Technologies and Innovative Research, Vol.6, Issue.4, pp-657-664, April 2019.
- 31. "Bacilli Bacterial Cell Image Analysis using Active Contour Segmentation with SVM Classifier", World Scientific News, 127(4), April 2019, pp.23-35.
- 32. "Categorization of Aluminium Oxide Nanoporous media based on the Pore Circularity using Image Processing Techniques", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN: 2349-5162, Vol.6, Issue 4, pp.349-355, April 2019.
- "Characterization of Aluminium Oxide Nanoporous Images using different Segmentation Techniques", International Journal of Innovative Technology and Exploring Engineering, (IJITEE), Volume 8, Issue 12, pp.2491-2497, Blue Eyes Intelligence Engineering & Sciences Publication, Oct 2019.
- 34. "Automated Method for Optic Disc Detection and Elimination in Digital Fundus Images", International journal of recent technology and engineering (IJRTE), Vol.8, Issue.4, Nov 2019.
- 35. "Characterization of Aluminium Oxide Nanoporous Images using different Segmentation Techniques", International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 8, Issue. 12, pp. 2491-2497, 2019.
- 36. "Effect of Voltage, Concentration and Temperature on Aluminum Oxide Nanopores using Fuzzy Inference System", International Journal of Control and Automation, Vol. 12, No. 6, pp. 686-696, 2020.
- 37. "Automated Characterization of Aluminum Oxide Nanopore FESEM Images using Machine Learning Algorithms", International Journal of Advanced Science and Technology, Vol. 29, No. 03.0, pp. 6932-6942, 2020.
- 38. "Automatic Detection of Microaneurysms from Digital Fundus Images Using LBP Features", International Journal of Control and Automation Vol. 13, No.2, (2020), pp. 1386 1395.
- 39. "Detection and Classification of Diabetic Retinopathy using Histogram of Oriented Gradients and Decision Tree Classifier", International Journal of Advanced Science and Technology, Vol. 29, No. 04, 2020, pp.8640 –8648, ISSN 2005-4238.
- 40. "Detection of Non Proliferative Diabetic Retinopathy from Digital Fundus Images", International Journal of Current Research and Review, Vol. 13, Issue 08, April 2021, pp.10-15
- 41. "The Fusion of Features for Detection of Clinical Symptoms of Diabetic Retinopathy and its Grading from Digital Fundus Images", International Journal of Computer Information Systems and Industrial Management Applications, ISSN 2150-7988, Volume 13 (2021) pp. 172-181.

- 42. "Silver Nanoparticle (AgNps) Image Analysis Using Digital Image Processing Techniques", 2nd International conference on IoT Based Control Networks and Intelligent Systems, Elsevier SSRN Ejournal Computing Science, Vol. 4, Issue 73, pp-38-48, June 28-29 2021 ISSN 1556-5068 DOI: 10.2139/ssrn.3882648.
- 43. "Boron Nanoparticle Image Analysis using Machine Learning Algorithms", Journal of Advanced Applied Scientific Research (JOAASR) -ISSN: 2454-3225 Vol. 4 No. 1 (2022): pp-28-37. DOI: <a href="https://doi.org/10.46947/joaasr412022223">https://doi.org/10.46947/joaasr412022223</a>.
- 44. Automatic Measurement of Copper Oxide (CuO) Nanoparticles using Multilevel-Otsu's Segmentation Method, Journal of Data Acquisition and Processing, Vol. 37 (5) 2022, pp. 1255-1264. ISSN 1004-09037.
- 45. An improved machine learning algorithm for Silver Nitrate nanoparticle images: A Study on Computational Nano-Materials. Indian Journal of Science and Technology, Vol. 16(17), 2023, pp. 1284-1294, ISSN: 0974-5645. (Web of Science)
- 46. An Improved Method for Automatic Characterization of Aluminum Oxide Nanopore FESEM Images.
- 47. An Analytical Model for Prediction of Floods Using Machine Learning, June 2023, <a href="International Journal for Research in Applied Science and Engineering Technology">International Journal for Research in Applied Science and Engineering Technology</a> 11(6):918-920, DOI:10.22214/ijraset.2023.53208
- 48. Integrative Image Enhancement Method for COVID-19 Detection using Chest X-ray and CT-Scan images, The Indian Journal of Technical Education, Vo.47, No.1(2), 2024, pp. 11-28. ISSN 0971-3034, **UGC Care Group 1 Journal**, Impact Factor: 7.5
- 49. Automatic Writer Identification of Historical Kannada Handwritten Palm Leaf Manuscripts using AlexNet Deep Learning Approach, International Journal on Recent and Innovation Trends in Computing and Communication, Vol. 11, Issue 11, July 2023, PP. 10046-1050, ISSN 2321-8169.
- 50. Biosynthesized MGo-ZNo Metal oxide nanocomposite image analysis using machine learning algorithms, Journal of Dynamics and Control, Vol. 8, Issue 9, 2024, pp.609-620 ISSN: 1672-6553. **Scopus, UGC care list**
- U-NET: Convolutional Neural Network for Binarization of Historical Kannada Handwritten Palm Leaf Manuscripts, Journal of Dynamics and Control, Vol. 8, Issue 10, 2024, pp.112-128. ISSN: 1672-6553. Scopus, UGC care list

#### **International Conferences**

- "Digital Image Analysis of Bacilli Bacterial Cells using Active Contour Method", Int'l. Conf. on Computational Vision and Robotics (ICCVR-2010), Bhubaneswar. August 21-22, 2010, pp. 89-95.
- "Digital Image Analysis of Cocci Bacterial Cells using Active Contour Method", IEEE Int'l. Conf. on Signal and Image Processing (ICSIP-2010), 15th - 17th, Dec. 2010, pp.163-168. ISBN: 978-1-4244-8594-9.
- 3. "Digital Microscopic Image Analysis of Spiral Bacterial Cell Groups", Proc. of Int'l. Conf. on Intelligence Systems and Data Processing (ICISD-2010), 24-25 Jan. 2011, pp. 209-213. ISBN: 978-1-6128-3002-0.
- 4. "Digital Microscopic Image Analysis of Adenovirus Particles using Active Contour Multigrid Model", Proc. of Int'l. Conf. on Advanced Computing, Networking and Security, Adcons-2011, Vol 1, pp. 174-180, NITK Surathkal, 2011.
- "An improved Automated Method for identification of Bacterial Cell Morphological Characteristics", Proc. of Int'l. Conf. on Advances in Computer Science and Engineering (ICACSE 2013), 7-8 January 2013, Lords Institute of Engineering and Technology, Hyderabad, India, pp.11-16.

- 6. "Restoration of Degraded Kannada Handwritten Paper Inscriptions (Hastaprati) using Image Enhancement Techniques", IEEE International Conference on Computer Communication and Informatics (ICCCI -2017), 2017.
- 7. "Aluminium oxide Nanopore Image Analysis Using Digital Image processing Techniques", 3rd International Conference on Computing, Communication, Control and Automation (ICCUBEA-2017), at Pimpri Chinchwad College of Engineering, Pune, 17-18 August 2017
- "Historical Kannada Handwritten Scripts using Line Segmentation with LBP Features", Alliance International conference on Artificial Intelligence and Machine learning, Bangalore, 26-27 April 2019.
- "An Improved Method for Measuring the Properties of Aluminium Oxide Nanopore FESEM Images", Conference Proceedings of Alliance International Conference on Artificial Intelligence and Machine Learning (AICAAM), pp. 68-78, 2019, Conference Location: Bengaluru, India.
- 10. "Historical Kannada Handwritten Character Recognition Using Machine Learning Algorithm", 12th International Conference on Soft Computing and Pattern Recognition (SOCPaR), Vellore, Vol. 1383. Springer, Cham, pp-311-319,2020
- "The Fusion of features for detection of Cotton Wool Spots from Digital Fundus Images",
   12th International Conference on Soft Computing and Pattern Recognition (SOCPaR),
   Vellore, Vol. 1383. Springer, Cham, Vol. 1383. Springer, Cham, pp- 530-538,2020
- 12. Iron Oxide Nanoparticle Image Analysis using Digital Image Processing Techniques, Proceedings of 1<sup>st</sup> International Conference on advances in Computer Vision and Artificial Intelligence Techniques (ACVAIT-2022), held at Dr. Babasaheb Ambedkar Marathawada University, Aurgangabad, India, 1-2 August 2022, ATLANTIS PRESS ) Springer Nature.

#### **National Conference**

- 1. "An Iterative Thresholding Procedure for Segmentation of Digital Bacterial Cell Images", Proceedings of National Conference on Signal Processing and Communication (NCSPC 2006), 7-8, July, 2006, pp.60-63.
- "Automatic Identification and Classification of Bacilli Bacterial Cell Growth Phases in Digital Microscopic Images", National Seminar on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), Feb.15th and 16th, 2010, Bidar, pp.56-59.
- 3. "Automated Identification and Classification of Rotavirus-A Particles in Digital Microscopic Images", National Seminar on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), Feb.15th and 16th, 2010, Bidar, pp.69-73.
- "Automated Identification and Classification of White Blood Cells (Leukocytes) in Digital Microscopic Images", National Seminar on Recent Trends in Image Processing and Pattern Recognition (RTIPPR-2010), Feb.15th and 16th, 2010, Bidar, pp.131-134.
- "Measurement of Physical Properties of Anodized Al2O3 FESEM Images", National Conference on Computer and Information Technology (NCCSIT-2017), at Karnataka State Women's University, Vijayapura

#### **BOOK Chapters**

- 1. "Automated Gram-staining Characterization of Digital Bacterial Cell Images", Proceedings of the 2nd International Conference on Signal and Image Processing (ICSIP-2009), pp. 209-211, ISBN. 978-93-80043-26-5, Published by Excel India Publisher New Delhi.
- 2. "Automatic Classification of Bacterial Cells on Digital Microscopic Images", Proceedings of SPIE 2nd International Conference on Digital Image Processing (ICDIP-2010), Vol.754613-1-6, pp. 1-6, ISBN. 9780819479426, Published by SPIE Publisher Singapore.
- 3. "Segmentation and Identification of Rotavirus- A in Digital Microscopic Images using Active Contour Model", 2nd International Conference on Contours of Computing Technology

- (Thinquest-2010), Mumbai, March 13-14, 2010, pp. 1177-181, published by Springer, ISBN: 978-81-8489-988-7.
- "Digital Microscopic image analysis of spiral bacterial cell Groups", Proceedings of the Multi-Conference 2011 2nd International Conference on Signals, Systems & Automation (ICSSA 2011) & 1st International Conference on Intelligent Systems & Data Processing (ICISD 2011), Brown Walker Press, Universal Publishers, 2011, pp.209-213, ISBN.9781612330020.
- 5. "Digital Microscopic Bacterial Cell Growth Analysis and Cell Division Time Determination of Escherichia coli using Fuzzy Inference System", Springer LNCS Vol. 7135, pp. 207-215, 2012.
- "Restoration of Degraded Historical Kannada Handwritten Document Images using Image Enhancement Techniques", International Conference on Soft Computing and Pattern Recognition (SoCPaR 2016), 2016, ISBN. 978-3-319-60617-0, pp. 498-508, Published by Springer Cham.
- "Age type Identification And Recognition of Historical Kannada Handwritten Document Images using HOG Feature Descriptors", Proceedings of the International Conference on Communication and Signal Processing 2018 (ICCASP2018), Published by Springer International Publishing AG.
- 8. "Effect of Time on Aluminium Oxide FESEM Nanopore Images using Fuzzy Inference System", Proceedings of the second International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R 2018), Held at Solapur University, Solapur, on December 21 and 22 of 2019, Published by CCIS Springer International Publishing AG, Vol. 1037, pp 397-405, ISBN 978-981-13-9187-3
- "Exudates Detection from Digital Funds Images using GLCM Features with Decision Tree Classifiers", Proceedings of the second International Conference on Recent Trends in Image Processing and Pattern Recognition (RTIP2R 2018), Held at Solapur University, Solapur, on December 21 and 22 of 2019, Published by CCIS Springer International Publishing AG, Vol. 1037, pp 245-257, ISBN 978-981-13-9187-3
- "Automated Detection and Counting of Red-Dots from Digital Fundus Images", 5th International Conference on ICT for Sustainable Development, Panaji Goa 23rd and 24th July 2020, Simon Fong, Nilanjan Dey, Amit Joshi (Eds): ICT Analysis and Applications, Proceedings of ICT4SD volume 2, pp. 339-347.
- 11. "The Fusion of features for detection of Cotton Wool Spots from Digital Fundus Images", 12th International Conference on Soft Computing and Pattern Recognition (online), Dec 15-18th 2020, Proceedings of the 12th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2020). SoCPaR 2020. Advances in Intelligent Systems and Computing, Springer Cham, Vol. 1383, pp 530-538
- 12. "Historical Kannada Handwritten Character Recognition using Machine Learning Algorithm", 12th International Conference on Soft Computing and Pattern Recognition (online), Dec 15-18th 2020, Proceedings of the 12th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2020). SoCPaR 2020. Advances in Intelligent Systems and Computing, Springer Cham, Vol. 1383, pp 311-319
- Iron Oxide Nanoparticle Image Analysis Using Machine Learning Algorithms. (2023). In: Shetty, N.R., Patnaik, L.M., Prasad, N.H. (eds) Emerging Research in Computing, Information, Communication and Applications. Lecture Notes in Electrical Engineering, vol 928. Pp.233-240, Springer Nature, Singapore. <a href="https://doi.org/10.1007/978-981-19-5482-520">https://doi.org/10.1007/978-981-19-5482-520</a>. ISSN 1876-1100
- Metal and Metal Oxide Nanoparticle Image Analysis using Machine Learning Algorithms, EAI BDCC 2022 - 5th EAI International Conference on Big Data Innovation for Sustainable Cognitive Computing. BDCC 2022. EAI/Springer Innovations in Communication and Computing, 978-3031283239. pp. 27-38.
- Restoration of Ancient Kannada Handwritten Palm Leaf Manuscripts Using Image Enhancement Techniques, EAI BDCC 2022 - 5th EAI International Conference on Big Data

- Innovation for Sustainable Cognitive Computing. BDCC 2022. EAI/Springer Innovations in Communication and Computing, ISBN 978-3031283239. pp.101-109
- 16. Restoration of Ancient Kannada Handwritten Palm Leaf Manuscripts with Modified Sauvola Method using Integral Images- 8th International Conference on ICT for Sustainable Development-2023, Vol-782, pp-39-47, DOI:https://doi.org/10.1007/978-981-99-6568-7 5.
- Ancient Kannada Handwritten Character Recognition from Palm Leaf Manuscripts using PyTesseract-OCR Technique, Cognitive Computing and Information Processing- CCIP 5<sup>th</sup> International Conference - 2023 series , Vol. 2024, Springer Nature, eISBN 978-3-031-60725-7, pp. 154-162

#### воок

1. "A Computational Study on Bacterial Cell Image Analysis— Digital Image Processing Techniques", Lambert Academic Publishing (LAP), New York, 2016, ISBN: 978-3-659-89032-1.

#### **AWARDS AND RECOGNITIONS**

- Young Scientist Award Feb. 2012, Seed Money to Young Scientist for Research, from Vision Group on Science and Technology, Dept. of Information Technology, Biotechnology and Science and Technology, Govt. of Karnataka, Bangalore. Award given by Bharat Ratna Prof. C. N. R. Rao and Prof. Roddam Narasimh at Tata Memorial Auditorium, Indian Institute of Science (IISc) Bangalore on 09.02.2012.
- 2. Soshita Vidyarthigala Samavesh, Secured highest marks in PGDCA course among SC/ST students and obtained 2nd Rank to Gulbarga University, Gulbarga.
- 3. Best paper presentation award and 1<sup>st</sup> prize in the 4th International eConference on Frontiers in Computer & Electronics Engineering and Nanotechnology held at Sanjeevini Engg. College, Panhala, Kolhapur, [ICF-CEET-] Nov.19-20, 2021.

## MEMBERSHIP/FELLOWSHIP AND POSITION OF RESPONSIBILITY IN PROFESSIONAL SOCIETY ACTIVITIES

- Editorial Board Member, International Journal for Advanced Science and Technology (IJAST), USA.
- 2. Life Member of International Association of Engineers (IAENG), Hong Kong.
- 3. Life Member of International Association for Computer Science and Information. Technology (IACSIT), Singapore.
- 4. Life Member of Karnataka State SC/ST Teacher's Association.
- 5. Life Member of Karnataka State Vijnanaparishat, Bangalore
- 6. Member, PG-Teacher's Association, RCU, Belagavi
- 7. Member, SC/ST Teacher's Association, RCU, Belagavi

### CHAIRMANSHIP/ MEMBERSHIP IN UNIVERSITY ACADEMIC BODIES, PG LEVEL (BOE/BOS)

- 1. Chairman, Board of Studies in Computer Science (UG and PG) , Rani Channamma University, Belagavi 2020-2023
- 2. Chairman, Doctoral Committee in Computer Science, Rani Channamma University, Belagavi 2020-23
- 3. Chairman, Dept. Of Computer Science, Rani Channamma University, Belagavi 2023-25
- 4. Chairman, Board of Examiner in Computer Science, Rani Channamma University, Belagavi
- 5. Chairman, Board of Examiner and Board of Studies, Kannada University, Hampi.
- 6. Member, Department Council, Dept. of Computer Science, Rani Channamma University, Belagavi.
- 7. Member, Board of Examiner, Dept. of Computer Science, Davangere University, Davangere.

- 8. Member, Board of Studies, Dept. of Computer Science, Davangere University, Davangere.
- 9. Member, Board of Examiner, Dept. of Computer Science, Kuvempu University, Shimoga.
- 10. Member, Board of Studies, Dept. of Computer Science, Kuvempu University, Shimoga
- 11. Member, Doctoral Committee, Rani Channamma University, Belagavi, Davangere University, Davangere, , Kuvempu University, Shimoga
- 12. Member, Board of Studies, Dept. of Computer Science, Govt. Degree College, Gulbarga.
- 13. Director, Rani Channamma University P.G. Centre, Torvi, Vijayapura, Karnataka. 2020-2023

#### **RESEARCH VISITS**

 Attended and presented a research paper entitled "Automatic Classification of Microscopic Digital Bacterial Cells", International Conference on Digital Image Processing (ICDIP-2010)" held on Feb. 26-28, 2010 at Nanyang Technological University, Singapore, Financial assistance was provided by UGC.

Dr. Parashuram Bannigidad

List of Ph.D. Students Successfully Awarded under the Guidance of Dr. Parashuram Bannigidad

SI.	Name of the Candidate	Title of the Thesis	Date of
No			award
01	Chandrashekhar Gudada	Historical Kannada Handwritten	28.02.2020
		Scripts Recognition System	
02	Jalaja Udoshi	A Study on Aluminium Nanoparticle	23.10.2021
		Image Analysis using Digital Image	
		Processing Techniques	
03	Asmita Deshpande	Digital Fundus Image Analysis for	17.12.2021
		Detection of Retinopathy Disorders	
04	Smt. Namita Potraj	Metal and Metal Oxide	19.10.2023
		Nanoparticle Image Analysis using	
		Digital Image Processing	
		Techniques	

# List of Ph.D. Students doing research under the Guidance of Dr. Parashuram Bannigidad

- 01. Mr. Sharanabasappa Sajjan, Machine Learning Approaches for Historical Kannada Handwritten Character Recognition using Palm Leaf Manuscripts
- 02. Smt. Vaishali Kale, Automatic Detection and Assessment of Disease Progression in COVID-19 from CT-Scan/X-ray Images using Machine Learning Techniques
- 03. Sagar Chingli Multi Metal Oxide Nano Composite Image Analysis A Study on Structural Activity Relations using Digital Image Processing Techniques
- 04. Shiivakumar Kalaburagi- Digitization and Recognition of Historical Kannada handwritten Manuscripts using Digital Image Processing Techniques



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