## **Curriculum Vitae**

## Dr. Parashuram Bannigidad

Assistant Professor and Research Supervisor School of Mathematics and Computing Science Department of Computer Science Rani Channamma University, Vidyasangama NH-4, Belagavi-591156, Karnataka, INDIA Email ID: parashurambannigidad@gmail.com Contact No. +919480162154

### **PERSONAL DETAILS**

1	Name	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	Department of Computer Science,
		Rani Channamma University, Vidyasangama,
		NH-4, Belagavi-591156, Karnataka, INDIA
12	Email ID	parashurambannigidad@gmail.com
13	Contact No	+919480162154

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

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

### **RESEARCH AREA**

Digital Image Processing Medical and Bio-Medical Image

**Processing** 

Document Image Analysis Pattern Recognition

Nano Technology Data Mining

### **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), Govt. of Karnataka, Dept. of IT, BT, and Science and Technology	15.02.2012 TO 31.03.2013	20.00
Minor Research Project	Rani Channamma University, Belagavi	04.09.2017 TO 05.12.2018	0.625
Minor Research Project	Rani Channamma University, Belagavi	01.06.2020 TO 31.05.2020	0.75

## **RESEARCH GUIDANCE**

- Ph.D. Awarded 01 Ph.D. Student has awarded
- Presently 03 students are working under my supervision for their Ph.D. Research Work
- M.Sc. and MCA Projects Guided More than 60 students are successfully completed

## **RESEARCHPUBLICATIONS**

Total No. of Publications		
•	International Journal	- 32
•	International Conference	- 10
•	National Conference	- 07
•	Book Chapter	- 09

Book - 01

#### **International Journal**

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

- "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
- "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)
- Automatic 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)
- 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 nonuniformally illuminated historical Kannada handwritten document images", International Journal of Computer Engineering and Applications (IJCEA), Vol.12, pp.1-13, 2018, ISSN. 23213469.
- 19. "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, 2018, ISSN. 23213469.
- 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, 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.
- 26. "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.
- "Historical Kannada Handwritten Character Recognition using K-Nearest Neighbour Technique", Journal of Artificial Intelligence Research and Advances, Volume 6 Issue 1 April 2019.
- 28. "Age-Type Identification and Classification of Historical Kannada Handwritten Scripts using Line Segmentation with HOG feature Descriptors", World Scientific News, 123, 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, 2019, pp.805-814.
- 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, 2019.
- 31. "Bacilli Bacterial Cell Image Analysis using Active Contour Segmentation with SVM Classifier", World Scientific News, 127(4), 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

#### **International Conference**

- 1. "Automated Gram-staining Characterization of Digital Bacterial Cell Images", International Conference on Signal and Image Processing (ICSIP-2009), Aug.19-21, 2009, Mysore, pp.209-211. ISBN: 978-93-80043-26-5.
- 2. "Automatic Classification of Bacterial Cells on Digital Microscopic Images", 2nd International Conference on Digital Image Processing (ICDIP-2010), Proc. of SPIE Vol. 7546-53, February 26-28, 2010, Singapore, pp.754613-1-6. ISSN: 0277-786X, ISBN: 9780819479426, IF: 0.658.
- 3. "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.
- 4. "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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. Restoration of Degraded Kannada Handwritten Paper Inscriptions (Hastaprati) using Image Enhancement Techniques, IEEE International Conference on Computer Communication and Informatics (ICCCI -2017), 2017.
- 9. 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.
- 10. Age-Type Identification and Classification of Historical Kannada Handwritten Scripts using Line Segmentation with LBP Features, Alliance International conference on Artificial Intelligence and Machine learning, Bangalore, 26-27 April 2019.

#### **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.
- 2. "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.
- 4. "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.

- 5. "Measurement of Physical Properties of Anodized Al2O3 FESEM Images" National Conference on Computer and Information Technology(NCCSIT-2017)
- 6. "Measurement of Physical Properties of Anodized Al2O3 FESEM Images", National Conference on Computer and Information Technology (NCCSIT-2017), at Karnataka State Womans University, Vijayapura
- 7. "A hybrid approach for digital fundus images using image enhancement techniques", National Conference on Computational Science and Soft Computing (NCCSSC-2017), at Jawaharlal Nehru National College of Engineering Shivamogga

## **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.
- 4. 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.
- 7. 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.
- 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.
- 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.

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 "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.

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

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

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

- 1. Chairman, Board of Examiner and Board of Studies, Kannada University, Hampi.
- 2. Member, Board of Examiner, Dept. of Computer Science, Gulbarga University, Gulbarga,
- 3. Member, Department Council, Dept. of Computer Science, Rani Channamma University, Belagavi.
- 4. Member, Doctoral Committee, Rani Channamma University, Belagavi.
- 5. Member, Board of Studies in Computer Science, Rani Channamma University, Belagavi.
- 6. Member, Board of Studies, Govt. Degree College (Autonomous), Gulbarga

## **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)