

## FACULTY PROFILE

**Name** : **Dr. Bharati M. Reshmi**



**Designation** : **Associate Professor**  
**Department** : **Information Science and Engineering**  
**Employee ID** : **TIS003**  
**E mail ID** (College official ID), (Personal mail ID) : **bmris@becbgk.edu, breshmi@yahoo.com**

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**Vidwan Id** : 139900  
**Google Scholar ID** : RhvibIOAAAAJ

**Qualification** : **Ph.D.**

**Professional Experience**

Teaching experience : **28 Years**

Industry experience : ---

**Administrative**

**Responsibilities**

1. Working as a Academic Council member (College level)
2. Working as a IQAC Member (College level)
3. Working as department BOS Coordinator
4. Worked as department Coordinator for Board of Examination (BoE)
5. Worked as department Coordinator for Question Paper Proof reading
3. Worked as department Coordinator for theory valuation
4. Worked as department Placement Coordinator
5. Worked as department KSCST Coordinator
6. Worked as department QEEE Coordinator
7. Worked as department Coordinator for Spoken Tutorial IIT Bombay

**Teaching** :

<b>No. of Projects Guided</b>	<b>: 25</b>
UG	:
PG	:
<b>Research</b>	
Interest Area	: <b>1. Medical Image Analysis</b> <b>2. Artificial Intelligence and Machine Learning</b> <b>3. Data Science</b>
<b>No. of Research Scholars</b>	
Pursuing	: <b>01</b>
Awarded	: <b>01</b>
<b>Patents</b>	: <b>01 (Published)</b>
<b>Research Grants</b>	: <b>---</b>
<b>Publications</b>	: <b>02</b>
Books/Chapters	
<b>Journals (with citations)</b>	: <b>1. Bharati M Reshmi, IS Rajesh, “A novel method for automatic identification of fovea location and its centre in colour retinal fundus images”, International Journal of Medical Engineering and Informatics ,Vol.13,No.2,2021, pp.103-110</b> <b>2. Rajesh I S, Bharathi Malakreddy A, Bharati M Reshmi, “A review on automatic identification of fovea in retinal fundus images”, International Journal of Medical Engineering and Informatics, Vol.12 No.2, 2020, pp.169 – 179</b> <b>3. G. G Rajput and B M Reshmi. Article: "Automatic detection of Optic Disc based on Mathematical Morphology using Retinal Fundus Images". IJCA Proceedings on National conference on Digital Image and Signal Processing DISP 2015(2):1-5, April. (Citations:04)</b> <b>4. G G Rajput and B M Reshmi,Sidramappa C, “Automatic detection of fovea center using mathematical morphology in fundus images”, IJMI. International Journal of Machine Intelligence. ISSN: 0975–2927 &amp; E-ISSN: 0975–9166, vo.l 3(4), 2011. (ICV:7.09 (2012), Citations:08)</b> <b>5. S S Manvi, B M Reshmi, and Bhagyajyoti, “An agent based intrusion detection model for mobile adhoc networks”, Mobile Information systems, Mobile Information systems vol. 2(4), 2006, IOS Press. (Impact factor:0.849, Citations:04)</b>
<b>Conferences</b>	: <b>1. G G Rajput, Bharati M R, Rajesh I S, "Automatic detection and grading of diabetic maculopathy</b>

**using fundus images"**, International Conference on Computational Intelligence and Data Science (ICCIDS 2019), **Elsevier precdia Computer Science**, Volume 167, 2020, Pages 57-66

**(Citations=01)**

2. Rajesh I.S., Bharathi M.A., Reshmi B.M. **"A Comprehensive Review on Automatic Diagnosis of Diabetic Maculopathy in Retinal Fundus Images."** In: Thampi S., Marques O., Krishnan S., Li KC., Ciuonzo D., Kolekar M. (eds) *Advances in Signal Processing and Intelligent Recognition Systems. SIRS 2018.* [https://doi.org/10.1007/978-981-13-5758-9\\_35](https://doi.org/10.1007/978-981-13-5758-9_35), Communications in Computer and Information Science, Vol. 968. Springer, Singapore, pp 410-420. **(Citations=04)**
3. Rajesh I S, Bharati M Reshmi, Bharathi M A **"Automatic Hard Exudates Identification In Color Retinal Fundus Images"**, proceedings of the 10th INDIACom-2016: IEEE Conference ID-37465, 3rd international conference on "Computing for sustainable Global Development" BVICAM, Delhi, ISSN-0973-7529; ISBN 978-93-80544-20-5, 2016, pp. 2041-46.
4. Rajesh I S, Bharati M R, Bharathi M A, **"A Survey on Automatic Detection of Diabetic Retinopathy using color Retinal Images"**, Second National Conference on Digital signal and Image Processing", Feb 19-20, 2016, PP-54-59.
5. G.G. Rajput and B. M. Reshmi, **"Automatic detection of diabetic macular edema from color fundus images"**, Proceedings of ICCR-2016, MIT, Mysore.
6. G. G. Rajput and B. M. Reshmi, **"Mathematical Morphology based Optic Disk detection in retinal fundus images"**, NCDISP, 12th and 13th Feb 2015, MIT Campus, Pune. ( **Best Oral Paper presentation Award**)
7. G G Rajput and B M Reshmi, **"Automatic detection of fovea center using mathematical morphology in fundus images"** Recent advances in Intelligent Informatics, Springer,Symposium on Intelligent Informatics (ISI'13), In: Thampi S., Abraham A., Pal S., Rodriguez J. (eds) *Recent Advances in Intelligent*

Informatics. Advances in Intelligent Systems and Computing,. Springer, Cham, [https://doi.org/10.1007/978-3-319-01778-5\\_5](https://doi.org/10.1007/978-3-319-01778-5_5), 2014, vol. 235, pp. 41-52

8. B M Reshmi and S S Manvi, “**Masquerade detection by using activity patterns**”, Proc. of the First European Conf on Computer Networks Defense School of Computing, University of Glamorgan, Wales, UK, Dec 2005.(**Presented in Glamorgan University, Wales, UK, Citations:02**)
9. B M Reshmi and S S Manvi, “**An agent based intrusion detection frame work for local area networks**”, National Conf on devices, intelligent systems and commincations, Sep 26-28 2005, MAHE, Manipal.
10. Ramya and Bharati Reshmi, “**A review on automatic detection of diabetic retinopathy using retinal fundus images**”, 2<sup>nd</sup> International Conference on adaptive computational intelligence, GSSS Institute of Technology, Mysore, 15<sup>th</sup> to 16<sup>th</sup> Dec 2020.

#### **Invited Talks**

- : 1. Invited as a Resource Person for **National Level One-Week Faculty Development Programme** on “Machine Learning based Project Architecture Design”, under TEQIP-III, held on 15<sup>th</sup> to 19<sup>th</sup> June 2020.
2. Invited as a Resource Person for SDP on “MATLAB”, BEC, Bagalkot
3. Invited as a Resource Person for **FDP** on “Internet Protocols” on 21st -26th Aug 2006, in BEC Bagalkot.
4. Invited as a Resource Person for TEQIP Phase III SDP on Modeling, Simulation and Implementation using Matlab and Simulink.

#### **Events Organized**

- : 1. Coordinator, NASSCOM Future Skill Training Programme under TEQIP phase III , 3 Weeks STTP on Artificial Intelligence and Machine Learning, (23-02-2021 to 14-03-2021)
2. Coordinator, Pre Placement Training for Pre final year and final year ISE students for last 5 years

#### **Conferences/ Symposiums/ Workshops/Training Programs Attended**

- : 1. 3 days AICTE ATAL workshop on Embedded systems-An application driven approach, organized by AICTE, Arm Education, and ST micro electronics.
2. 5 days national workshop on Optimization methods for machine learning and deep learning, organized by CSE dept, NorthCap University, 20<sup>th</sup> Sep to 24<sup>th</sup> Sep

2021.

3. 5 days AICTE ATAL workshop on Intelligent and collaborative robotics, organized by BITS Pillani, 13/9/2021 to 17/9/2021
4. TEQIP- II sponsored e- training Faculty Development Programme (FDP) on “**Artificial Intelligence and Machine Learning**” during December 07-17, 2020 organized by IIT Indore
5. 1 week AICTE short term training on “**Deep learning applications in Cyber security for engineering and Science**”
6. AICTE Online Orientation Programme for mentors under NITTT. 4<sup>th</sup> to 8<sup>th</sup> Jan 2021. NITTR, Chennai.
7. QIP sponsored FDP on “**Differential equations: Solution techniques and applications**”, IIT Guwahati, Sep 7-12 2020
8. 5 days National level FDP on “**Opportunities and challenges of post pandemic era: An overview**”, BMSIT Bangalore, August 10-14 2020
9. 5 days FDP on “**Concepts, methods, challenges and future directions in medical analysis using machine learning**”, SJCE and JSS S&TU Mysore, August 10-14<sup>th</sup> 2020
10. 5 days FDP on “**Recent trends in engineering: Industry perceptive**”, Dr Ambedkar Institute of Technology, Bangalore, July 26<sup>th</sup> to 30<sup>th</sup> 2020
11. 5 days FDP on “**Exemplary Practices in Teaching-learning and Evaluation of Courses in Computer Science and IT**”, organized by VTU Belagavi and Indian Institute of IT, Allahabad, 3<sup>rd</sup> Aug to 7<sup>th</sup> Aug 2020
12. E workshop on AICTE “**Examination reform policy**”, Basaveshwara Engineering College, Bagalkot, 29<sup>th</sup> and 30<sup>th</sup> April 2020
13. 2 days workshop on IIT Bombay, **e-Yantra Lab Setup Initiative (eLSI)**, Matrusri Engineering College, Hyderabad, Telangana, 28<sup>th</sup> and 29<sup>th</sup> Feb 2020
14. 3 Days FDP on **Machine learning with Python**, Dept. of ISE, GSSSIETW, Mysore, 25<sup>th</sup> to 27<sup>th</sup> July 2019
15. Three days course on “**Open Society Problems Computing Solutions in Python**”, conducted at BEC, under TEQIP – II by IIT Bombay, March 29-31, 2017

16. One day Seminar on **“Recent trends in Information and communication Technology”**, held at Department of Computer Science, Gulbarga University, Kalaburgi
17. Two days Orientation program on **“Entrepreneurship development and implementation of DEBM”**, Programme organized by EDII and BVVS, BGK, 26<sup>th</sup> to 27<sup>th</sup> Aug 2015.
18. Two weeks FDP on **“Integrated Six Sigma-Green Belt and Design for Six Sigma”**, jointly organized by dept of ISE and Mechanical Engineering, BEC, Bagalkot, 20<sup>th</sup> to 30<sup>th</sup> Jan 2014.
19. Two days workshop on **“Effective leadership for excellence”**, organized by IACE, Bangalore, 6<sup>th</sup> to 7<sup>th</sup> Feb 2014.
20. Three days FDP on **“Research issues in distributed sensor networks”**, organized by Dept of ISE, BEC, BGK, 22<sup>nd</sup> to 24<sup>th</sup> Aug 2013.
21. Three days National workshop on **“Technical documentation using Latex”**, organized by Dept of Electronics and Communication Engg, 27<sup>th</sup> to 29<sup>th</sup> May 2013.
22. Ten days course of Study approved by the Hogwarts School for **“Defence against the dark arts”**, 26 June 2008 to 4<sup>th</sup> July 2008, INFOSYS Training, Centre, Mysore.
23. One week STC on **“Oracle”** from 29th Jan 07 to 2<sup>nd</sup> Feb 07, NITTR, Chandigarh
24. Six days STTP on **“Advanced networking and hands on training in network administration with free software”**, conducted at PSG College of Technology, Coimbatore, and March 26-31, 2007.
25. 3 days FDP on **“Signal processing and its applications”** under TEQIP by Dept of IT, BEC, BGK, 9<sup>th</sup> to 11<sup>th</sup> Oct 2006.
26. Six days FDP on **“Digital signal processor and its applications”** under TEQIP by Dept of IT, BEC, BGK, 25<sup>th</sup> Sep to 30<sup>th</sup> 2006.
27. One week FDP on **“C# and .NET”** under TEQIP by Computer Science and Engineering Dept BEC, BGK, 1<sup>st</sup> to 6<sup>th</sup> June 2006.
28. Two days National level seminar **“Recent trends in**

### **Computers, Communications and Networking”**

organized by Dept of Electronics and Communication Engineering, BEC, BGK, 15<sup>th</sup> to 16<sup>th</sup> March 2005.

29. Two days National seminar on “**Technical education and challenges in the new millennium**”, organized by BEC, BGK, 3<sup>rd</sup> to 4<sup>th</sup> Nov 2001.
30. Two days National level Seminar on “**Fuzzy Techniques and their applications**”, Conducted by BIET Davanagere, 14<sup>th</sup> to 15<sup>th</sup> Dec 1996.
31. Four days’ workshop on “**Telematics**” conducted by Dept of Electronics and Communication, BVB College of Engineering and Tech, Hubli, 27<sup>th</sup> to 30<sup>th</sup> June 1995.

### **Awards and Honors**

- :
1. NPTEL Elite Certification on Deep learning
  2. Certification of Participation in the Guinness World Record Event, April 24<sup>th</sup> 2021, Sponsored by Guvi, AICTE.
  3. NPTEL Certification on Data Science for Engineers
  4. Awarded A Grade Certificate for participating TBT on Robotics by IIT Bombay, 2020.
  5. Certificate of recognition, Guiding an academic project “Automatic detection of DR using fundus images: Tele ophthalmology system”, State level Project exhibition held at RVCE, Bangalore, 2017. (Won 2<sup>nd</sup> Prize)
  6. Best oral paper presentation award, “Mathematical Morphology based Optic Disk detection in retinal fundus images”, NCDISP, 12<sup>th</sup> and 13<sup>th</sup> Feb 2015, MIT Campus, Pune.
  7. Certificate of recognition, Guiding of Innovative bus tracking mobile application, Step-Auto 2015 Software Testing Conference, 21<sup>st</sup> May 2015.
  8. Bronze partner faculty, Campus Connect Program, Infosys, 2015.
  9. Bronze partner faculty, Campus Connect Program, Infosys, 2014.
  10. Certificate of Participation, Mentor of Team “Magnanimous”, IBM Academic Initiative, The great mind challenge, 2008.