


PERSONAL DETAILS			
Name	Dr. Manoj Kumar S B		
Department	Electronics & Communication Engg.		
Designation	Assistant Professor & PG Coordinator		
Qualification	M.Tech, Ph.D.		
Teaching Experience	12 Years		
Email ID	manojkumarsb@bgsit.ac.in	DOJ	19-07-2010
Vidwan-ID	119781	Scopus ID	57190388053
Orcid ID	0000-0002-3037-2564	Google Scholar ID	ufgo6MwAAAAJ
Type of Association	Regular		
Core Discipline	Electronics & Communication Engineering		
Specialization	VLSI Design and Embedded System		
Areas of Interest	<ul style="list-style-type: none"> · VLSI · Image processing · Communication · Networking 		
MEMBERSHIP OF PROFESSIONAL BODIES			
Professional Society	From Year	Membership Number/ Nature	
ISTE	2020	LM-131722	
IEEE	April 2020	96715906/YEARWISE	

ISCA	August 2019	L-38406/ LIFETIME
IEAE(InSc)	July 2016	IEAE-2017050/LIFETIME
IEI	July 2016	AM-1639431/LIFETIME

PUBLICATIONS

INTERNATIONAL JOURNALS: 22

1. Manojkumar S.B, Sushmitha R, Shree gouri K B, Shreya H C, Vidyashree S, "*Detection of Face Mask Using Raspberry Pi*" International Journal of Advanced Research in Computer Communication Engineering, ISSN (online)-2278-1021, Volume 10, Issue 7, July 2021.
2. Manojkumar S.B, Supritha B M, Sushma U J, Pooja A C, Suchithra K M, "*Swadeshi Hi Tech Robot for Teaching*", International Research Journal of Modernization in Engineering Technology and Science (IRJMETS), ISSN: 2582-5208, Volume:03/Issue:07/July-2021, Impact Factor- 5.354
3. Manojkumar S B et. al, "*Recent Advances in Graph Theory and Its Applications*", Advances in Mathematics: Scientific Journal, ISSN: 1857-8365, Vol 10, Issue 3, March 2021.
4. Manojkumar S B and Dr. H S Sheshadri, "*Detection of Diabetic Retinopathy Using Transfer Learning Method and Micro Aneurysms Detection Using Faster R-CNN*", Industrial Engineering Journal, ISSN: 0970-2555, Vol. XIV & Issue No.02 February - 2021.
5. Manojkumar S B and Dr. H S Sheshadri, "*Analysis of Detection of Diabetic Retinopathy using LPB and Deep Learning Techniques*", International Journal of Engineering Trends and Technology, ISSN: 2231 – 5381 /doi:10.14445/22315381/IJETT-V68I12P221, Volume 68 Issue 12, 123-131, December 2020.
6. Manojkumar S B and Dr. H. S. Sheshadri "*Micro aneurysms Detection Using Faster R CNN network*" Solid State Technology, ISSN: 0038-111X, Volume 63, issue 2s, Nov2020.

7. Manojkumar S B and Dr. H. S. Sheshadri “*Diabetic Retinopathy Classification Using Transfer Learning and Exudates Detection Using Faster-RCNN*” Journal of Emerging Technologies and Innovative Research (JETIR), ISSN-2349-5162, Volume 6, Issue 5 www.jetir.org pp 29-34.

8. Manojkumar S B and Dr. H. S. Sheshadri “*Detection of Diabetic Retinopathy by Screening of Fundus Images*” International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 7 Issue V, May 2019- www.ijraset.com, ISSN: 2321-9653; SJ Impact Factor: 7.177, PP 3667-3674.

9. Manojkumar S B and Dr. H. S. Sheshadri “*Retinal Disease Detection Using LBP Technique*” International Journal of Scientific Research and Review (IJSRR), July 2018, Volume 7, Issue 7, ISSN 2279-543X. pp 142-150.

10. Manojkumar S B, “ECG Telemetry system for IOT using Raspberry Pi”, International Journal of Engineering Research & Technology (IJERT), Volume 6, Issue 13, ISSN 2278-0181. Pp 1-4

11. Manojkumar S B, “Automatic Voice Pronouncement Based Robot Fire Psychoanalytic System” International Journal of Engineering Research & Technology (IJERT), Volume 6, Issue 13, ISSN 2278-0181. Pp 1-4

12. R Manjunatha, Manojkumar S. B, and Dr. H. S. Sheshadri “*Optic Disc Detection using Red Channel Component in Fundus Images by Morphological Operations*” International Journal of Engineering Technology, Management and Applied Sciences (IJETMAS), June 2017, Volume 5, Issue 6, ISSN 2349-4476.

13. Manojkumar S B, Wireless Sensor Networks in Battlefield for Soldier’s Status Monitoring using Sensors International Journal of Innovative Engineering and Emerging Technology (IJIEET) August 2017, Volume 3, Issue 4

14. Manojkumar S B, “Architecture of Static Random-Access memory design using 65nm Technology”, International Journal of Engineering Research & Technology (IJERAT), August 2017, Volume 6, Issue 8

15. Manojkumar S B “Improving short Distance Communication Through The Hardware Utilization of SOLS Technology”, International Journal For Technological Research In Engineering (IJTRE), June 2016, Volume 3, Issue 10, ISSN (Online): 2347 – 4718.

16. Manojkumar S B “Moving object detection of videos with dynamic background using open CV and MATLAB”, International Journal For Technological Research In Engineering (IJTRE), May 2015, Volume 2, Issue 9, ISSN 2347-4718.

17. Manojkumar S B “Simulation of multiple targets for Radar testing”, International Journal of Innovative Science, Engineering & Technology (IJSET), May 2015, volume 2, issue 5.

18. Manojkumar S B “Secure wireless reconfiguration of FPGA based soft processor using ARM platform”, International Journal For Technological Research In Engineering (IJTRE), June 2014, Volume 1, issue 10.

19. Manojkumar S B “Design and synthesis of reversible fault tolerant carry skip adder/subtract”, International Journal of Emerging Science and Engineering (IJESE), June 2013, volume 1

20. Manojkumar S B “Design and Verification of OCP-AHB Bus Wrapper”, The international Journal of science & Technology (THEIJST), May 2014, volume II, Issue V

21. Manojkumar S B “Design and Implementation of Modified Adaptive filtering algorithm for noise cancellation in speech signal on FPGA for minimum resource usage”, International Journal of Inventive Engineering and Sciences (IJIES), ISSN 2319-9598, June 2013, Volume 1, Issue 7, pp 18-21.

22. Manojkumar S B “Design and synthesis of sequential circuit using reversible logic”, International Journal of Innovative research & Development (IJIRD), June 2013, Volume 2, Issue 6

INTERNATIONAL CONFERENCE: 5

1. Manojkumar S B and Dr. H. S. Sheshadri “*Detection of Retinal Disease Screening Using Local Binary Patterns*” Springer link (Part of the Lecture Notes in Electrical Engineering book series) (LNEE, volume 545), April 2019, ISBN:978-981-13-5802- 9© Springer Nature Singapore Pte Ltd. 2019 https://doi.org/10.1007/978-981-13-5802-9_91. pp 1055-1067.

2. Manojkumar S. B, R Manjunatha and Dr. H. S. Sheshadri “*An Identification of diabetic retinopathy using kirsch edge detection and watershed transformation algorithm*” International Journal of Engineering, Basic Sciences, Management & Social studies (IJEBS), Volume 1, Issue 1, May 2017, 978-93-84698-33-1.

3. Manojkumar S B and Dr. H. S. Sheshadri “*Classification and Detection of Diabetic*

retinopathy Using K-Means Algorithm” IEEE, International Conference on Electrical, Electronics, and Optimization Techniques ICEEOT 2016, IEEE Explore, ISBN: 978-1-4673-9939-5/16/\$31.00©2016 IEEE, pp 326-331

4. Manojkumar S. B, Manjunatha.R, and Dr. H. S. Sheshadri, “*Feature extraction from the fundus images for the diagnosis of diabetic retinopathy*”, IEEE, DOI:10.1109 /ERET. 2015. 7499020, ICERECT-2015, PESCE, Mandya.

5. Manojkumar S B and Dr. H.S. Sheshadri “*A Survey on: Evaluation database for Diabetic Retinopathy*” 2nd National Conference on Emerging Trends in Electronics and Communication (NCETEC-15) ISRASE eXplore Digital Library, May 2015, Volume 1, issue 1, ISBN:978-93-84935-29-0.

NATIONAL CONFERENCES:11

1. Manojkumar S B " Design and Analysis of a Low-dropout regulator using 180nm CMOS Technology”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:464-467

2. Manojkumar S B “Automatic attendance system using Webcam and RFID” Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:132-136

3. Manojkumar S B “PIC and Place Human follow Robot using Ultrasonic sensor”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:312-320

4. Manojkumar S B “A Survey on Transmission of Data using Li-Fi Technology”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:344-350

5. Manojkumar S B “Automatic anti-collision Switching and Secured Level Crossings”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:387-392

6. Manojkumar S B “A Survey on Hyper loop: A fifth mode of Transportation”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:393-397

7. Manojkumar S B “Design and implementation of Ripple free, short circuit protected variable power supply for technical laboratories using Multisim”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:457-463

8. Manojkumar S B “Gigabit Passive Optical Network”, Dept. of ECE, BGSIT, B G Nagara 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:497-502

9. Manojkumar S B “Design and Implementation of Android based Automatic Wheel chair”, Dept. of ECE, BGSIT, B G Nagar / 5th May 2017, Published in IJEBMS Volume 1, Issue 1, May 2017, Page no:617-622

10. Manojkumar S B “Fake Biometric Detection Using Image Quality Assessment”, Dept. of ECE, BGSIT, B G Nagar / 4th May 2016, Published in ISRASE Digital library

11. Manojkumar S B “Coin Based Mobile Charger Using Solar Tracking System”, Dept. of ECE, BGSIT, B G Nagar / 4th May 2016, Published in ISRASE Digital library

GUEST LECTURES DELIVERD

Invited College Name	Title of the topic	Date
PESCE, Mandya	VLSI Design Verification	5 weekends (Oct-Nov-2012)

WORKSHOPS/SEMINARS/FDPs/ PARTICIPATED: 58

1. Five-days FDP on “Digital VLSI Design and Verification” organized by Dept. of ECE, Bangalore Institute of Technology in association with Entuple Technologies and IEEE BIT CAS from 23rd August 2021 to 27th August 2021

2. Five-days FDP on “Artificial Intelligence and Machine Learning using Python” organized by AICTE and Learning (ATAL) Academy Online FDP at Engineering College Bikaner, from 21th June 2021 to 25th June 2021

3. One day webinar on “HAMARA TEJAS- India’s own 4th Gen Fighter” organized by the Department of Electronics and Communication Engineering at Dr. Ambedkar Institute of Technology, Bengaluru, held on 24th June 2021.

4. One day webinar on “Outcome based Education” organized by Department of Electronics and communication Engineering, BGS institute of Technology, B G Nagara held on 20th June 2021.

5. One day National webinar on “Post COVID-19 Era in Education and Technology” organized by Department of Computer science and Engineering in association with NOUS infosystems on 5th June 2021.

6. One day webinar on “Machine learning in Healthcare” organized by Department of Electronics and communication Engineering, Vemana Institute of Technology, Bengaluru on 29th May 2021.

7. Six-day AICTE-ISTE funded Induction program (workshop) on “Future Wireless Communication: Standards & Technologies” Organized by the Department of Electronics and Communication Engineering between 24th to 29th May-2021.

8. Five-days FDP on “Data Sciences” organized by AICTE and Learning (ATAL) Academy Online FDP at Global Academy of Technology, from 19th Jan 2021 to 23rd Jan 2021

9. Five-days FDP on “Artificial Intelligence” organized by AICTE and Learning (ATAL)

Academy Online FDP at Dr. Ambedkar Institute of Technology, from 4th Jan 2021 to 8th Jan 2021.

10. One day webinar on “Fundamentals of Antenna and MIMO” organized by Dept of ECE, Bahubali College of Engineering on 26th Oct 2020.

<p>11. Five-days FDP on “Internet of Things (IoT)” organized by AICTE Training And Learning (ATAL) Academy Online FDP at Institute of Engineering & Technology, Dr. B. R. Ambedkar University, Khandari Agra from 12th Oct 2020 to 16th Oct 2020.</p>
<p>12. One-day webinar on “Towards Resilient AI systems Challenges and Pitfalls” by IEEE Circuits and Systems (CAS) Society Bangalore Chapter on 25th Sept 2020.</p>
<p>13. Two-weeks FDP on “Fabrication Of Electronic Devices Using Nanomaterials” organized by Department of Electronics and Communication Engineering, JSS Science from 24th Aug to 4th Sept 2020.</p>
<p>14. Four-day FDP on “Distinguished Lectures in Frontier Areas of Electronics and Communication” organized by PES College of Engineering, Mandya from 24th Aug to 27th Aug 2020.</p>
<p>15. One-day webinar on “How to write effective technical paper” organized by GSSSIETW IEEE Student Branch on 24th August 2020.</p>
<p>16. One day webinar on “Industry 4.0” by IETE Mysuru on 16th August 2020.</p>
<p>17. Five-day FDP on “Concepts, Methods, Challenges and Future directions in Medical image analysis using Machine learning” organized by Department of Electronics and Instrumentation, SJCE , JSS S&TU, Mysuru from 10th Aug 2020 to 14th Aug 2020.</p>
<p>18. One-day webinar on “Entrepreneurship as a carrier choice: Challenges, Ideas and opportunities” by Dept. of CSE, VVCE, Mysuru on 8th August 2020.</p>
<p>19. Three-day FDP on “Recent Trends in Wireless Communication Technologies” organized by Department of ECE, Bangalore Institute of Technology in association with IMAPS” from 3rd Aug 2020 to 5th Aug 2020.</p>
<p>20. One-day webinar on “Embedded System and IoT” organized by “Citronics Club” by the Department of Electronics and Communication Engineering, City Engineering College, Bangalore on 13th July 2020.</p>

21. Five-day FDP on “Advances in Artificial Intelligence, Machine Learning and Robotics” organized by Dept. of ECE, VVCE, Mysuru from 6th July to 10th July 2020.

22. One-day webinar on “Low-Power Design Techniques for Digital Circuits” by IEEE

Circuits and Systems (CAS) Society Bangalore on 26th June 2020.

23. One-day webinar on “How to Utilize Design of Experiment for Accessing Quality Research” organized by Department of Applied Science Poornima Institute of Engineering and Technology, Kota on 19th June 2020.

24. Five-day FDP on “Designing Automation for Future Industries” organized by Department of Electronics and Communication Engineering, Ghousia College of Engineering, Ramanagara from 9th June 2020 to 13th June 2020.

25. Two-day webinar on “Recent Trends in Electronics and Communication Engineering” organized by Department of Electronics and Communication Engineering, Basaveshwar Engineering College (A), Bagalkot on 11th and 12th June 2020.

26. Three days Webinar series on “Telemedicine, IOT and Nano Science” organized by GSSS Institute of Engineering & Technology for Women from 10th to 12th June 2020.

27. A Workshop series on “Block/ System Level Functional Verification and Design Optimization using OrCAD Pspice” by IEEE Bangalore sections, and Entuple Technologies Pvt. Ltd on 5th June 2020.

28. A Workshop series on “Electronic System Design Flow - Architecture & Schematic Design Capture using OrCAD Pspice” by IEEE Bangalore sections, and Entuple Technologies Pvt. Ltd on 4th June 2020.

29. One-day webinar on “AI and Data Science” by IEEE Circuits and Systems (CAS) Society Bangalore Chapter on 30th May 2020.

30. Three-day FDP on “Digital Era of Teaching” organized by Diksoochi, Mysuru, on 11th to 13th May 2020.

31. Three-day Webinar series on “Satellite and Automation” organized by GSSSIETW IEEE Student Branch on 11th to 13th May 2020.

32. One day Webinar on “Tips To Become Successful Entrepreneur”, by IEEE, Bangalore Section on 8th May 2020.

33. One day Webinar on “Application Development Using MATLAB”, by CoreEL Technologies and Xilinx on 20th April 2020.

34. One day Webinar on “Embedded System Design Flow on Zynq using Xilinx Vivado”, by CoreEL Technologies and Xilinx on 13th April 2020.

35. One day Webinar on “Artificial Intelligence Programming using MATLAB”, by CoreEL Technologies and Xilinx on 9th April 2020.

36. One day FDP on “Significance of Intellectual property rights & Innovations”, by ACU Intellectual Property Rights Cell (ACUIPRC) on 10th March 2020.

37. One day FDP on “Applications of Artificial Intelligence & Machine learning”, organized by Dept. of CSE, BGSIT and ACU on 27th January 2020.

38. One day FDP on “Management of intellectual property for IPRC”, by ACU Intellectual Property Rights Cell (ACUIPRC) and KSCST in association with CIPAM Govt. of India on 21st June 2019.

39. Five-day FDP on “Machine Learning crash course (MLCC)” organized by Dept. of CSE and ISE, BGSIT, ACU and Google from 15th December to 19th December 2018.

40. One day International Symposium on Nanomaterials-2018(NanoMAT-2018) Dept. of Nanotechnology, VTU, Center for PG studies, Bengaluru region, Muddenahalli, Chikkaballapur, on 22nd September 2018

41. Four-day FDP on “Emerging Innovative approaches in VLSI, Communication & Network systems”, organized by Dept. of Electronics and Communication Engineering BGSIT, in association with KSCST, Govt. of Karnataka, from 10th April 2018 to 13th April 2018.

42. Six-Day Faculty Development Program on “Embedded Controller Programming with ARM CORTEX-M3”, organized by Dept. of ECE, BGSIT, B G Nagar from 29 January to 3 February 2018

43. Three-day FDP on “Image Processing and its applications in MATLAB” organized by Dept. of ECE, RIT, Hassan in associated with Vidvath Technologies Pvt. Ltd. from 21 Feb 2018 to 23rd Feb 2018.

44. One day Technology Volunteering event at Loginware Softech Pvt., Ltd. On 4th June 2017.

45. Two-day Workshop on “Internet of Things” organized by Dept. of ECE, BGSIT, B G Nagar, Innovative Cell UMIC, IIT Bombay on 21-22 March 2017.

46. Three-day workshop on “Analog and Digital VLSI Design using Cadence tools” organized by Dept. of ECE, RIT, Hassan from 28-30 April 2014.

47. Two Week ISTE Workshop on “Signals and Systems under ICT(MHRD)” organized by Dept. of ECE, PESCE, Mandya from 2-12th January 2014.

48. Three days FDP on “Mission 10X Engineering Faculty Workshop” organized by BGSIT, B G Nagara from 16-18 October 2013.

49. One-week VTU-VGST FDP on “Advances in Communication and Network systems” organized by Dept. of ECE, BGSIT, B G Nagara, from 12-16 March 2012.

50. One day workshop on “MSP430 & Applications” organized by Dept. of ECE, GCE, Ramanagaram on 31 January 2012.

51. Participated in International Conference on Emerging research in Electronics, Computer science and Technology (ICERECT-2012) PESCE, Mandya, from 21-22 December 2012.
52. Three-day National level workshop on “ARM 9/11 Architecture and its Applications”, organized by Dept. of ECE, SJCIT, Chickballapur, from 27-29 January 2011.
53. Three days VTU-VGST Sponsored FDP on “Advances in CMOS VLSI Design” organized by PESCE, Mandya from 8-10 February 2011.
54. Two-day FDP on Recent Trends in “Front End VLSI System Design” organized by Dept. of ECE, BGSIT, B G Nagar from 30-31 March 2011.
55. Two Days FDP on “Analog system Design” in association with Texas Instruments and Cranes Software, VVIET, Mysore from 12-13 July 2010
56. Five days FDP on “Recent Developments in VLSI Technology”. Organized by Dept. of ECE, PESCE, Mandya from 22-26 March 2010.
57. One-week STTP on “VLSI in Telecommunications” Organized by Dept. of ECE, PESCE, Mandya from 21-27 July 2008.
58. Six days workshop on “Embedded system design using Microcontrollers” organized by Jnana Sangama, VTU, Belgaum from 26 Nov-1 st Dec 2007

SUMMARY OF BOOKS/ MONOGRAMS PUBLISHED

Title of the Book	Year of Publication	Publisher
Medical Image Analysis: A Research Outcome	2016	Research India Publications (New Delhi), ISBN: 978-93-84443-21-4.
Medical Image Analysis: A Research Outcome (second edition)	2019	Research India Publications (New Delhi)

ONLINE COURSES

Course Title	Course Organization	Year
Microprocessors and Microcontrollers	NPTEL	2018-19
SOC Verification using system Verilog	Udemy	2019-20

Machine Learning: Making Computers think	Udemy	2019-20
Block chain and Deep Learning: Future of AI	Udemy	2019-20
Python AI and Machine learning for production and development	Udemy	2019-20
Deep learning, Transfer learning, Turtles	Udemy	2019-20

AWARDS, COMMENDATIONS RECEIVED

Nature	Year	Awarding Organization
Academic Excellence award (Best Teacher)	2017-2018	BGSIT, B G Nagara

PATENTS

1. Optimization of Motorcycle pitch using Nonlinear Controller

2. Women Safety using Intelligence of Things

3. Machine Learning and IOT Based Automated Health evaluation using medical images

GRANTS RECEIVED FOR MAJOR AND MINOR PROJECTS

Title of the project	Sanctioned Year	Agency	Amount
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Swadeshi Hi-Tech Robot for Teaching	2020-21	Karnataka State Council for Science and Technology (KSCST)	4500/-
COVID-19: Face Mask Detector and Alarm System Using Raspberry Pi	2020-21	Karnataka State Council for Science and Technology (KSCST)	4000/-
Wearable Device to Track COVID-19	2020-21	Karnataka State Council for Science and Technology (KSCST)	6000/-
An early detection of exudates in retinal fundus images using SVM algorithm	2019-20	Karnataka State Council for Science and Technology (KSCST)	3500/-
Farmer friend: IOT based smart polyhouse	2019-20	Karnataka State Council for Science and Technology (KSCST)	4000/-