PROFILE

Name	Dr.B.N.Manjunatha Reddy
Position & Affiliation	Professor and Associate Dean, Cambridge Institute of Technology
Areas of Interest	VLSI Design, Embedded Systems, AI & ML
Email	associatedean@cambridge.edu.in
LinkedIn ID	https://www.linkedin.com/in/b-n-manjunatha-reddy-94b12a46/?originalSubdomain=in
Google Scholar ID	0Lu4w3IAAAAJ
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Vidwan ID	147542

Educational Qualifications:

Ph.D	VLSI Design & Embedded Systems,	VTU	2018
MTech	Digital Electronics and Communication,	VTU	2003
BE	Electronics and Communication Engineering	Mysore University	1997

Areas of Research:

Low-Power VLSI Design, AI, Machine Learning, Privacy in VANETs

Brief Profile: (write about yourself)

Dr. B.N. Manjunatha Reddy is a distinguished academician and researcher with over 27+ years of teaching experience in Engineering education. Currently serving as a Professor and Associate Dean at Cambridge Institute of Technology, Bengaluru. He holds a Ph.D. in low-power VLSI Design and Embedded Systems from VTU, Belagavi. Dr. Reddy specializes in Artificial Intelligence, Machine Learning, VLSI Design, and Embedded Systems, with an extensive record of publishing research in prestigious international journals and conferences. His contributions include research on smart farming, vehicular networks, and low-power circuit design. Additionally, he has authored book chapters on advanced AI techniques and supervised many Ph.D. scholars. In his academic career, Dr. Reddy has played pivotal roles in curriculum design, accreditation

processes (NAAC, NBA), and examination coordination. He has also served as a paper reviewer, invited speaker, and doctoral committee member. His leadership includes organizing FDPs, conferences, and industry visits while ensuring a strong academic record for his students.

Dr.Reddy has also visited many countries like Dubai, China, Thailand, Abu Dhabi and presented his research work. He is a life member of IETE. He has organized/attended several FDPs, conferences and workshops. He also had given several technical talks in many forums. He was attended several conferences as chair and reviewer for various conference papers.

Awards/Achievements/Others:

- Received the Award of Excellence in Research-2023
- Appreciated for the exceptional Contribution as a Primary Evaluator in Toycathon, 2021 by AICTE.
- Appreciated for being a Jury member in INNOCENTRIC-2K21, 2K22 Virtual Inter-Collegiate Project competition held at GAT.
- Appreciated for getting 100% results in the final Examinations.
- Appreciated for conducting the National conferences at Global Academy of Technology.
- Awarded a cash prize and certificate for getting 100% results.
- Awarded a cash prize and certificate for getting very good student feedback.

Courses Taught:

Digital Design & Computer Organization • Operating Systems • Computer networks • Artificial Intelligence • Machine Learning • Elements of Internet of Things • Microcontrollers and Embedded Systems • IOT system architecture • Elements of cybersecurity and IOT • Computer Architecture • Digital Circuits • VLSI Design • Verilog HDL • Microprocessors • Microcontrollers • Logic Design • Digital Signal Processing • Computer organization • Fundamentals of CMOS VLSI • MSP 430 Microcontroller and many more.

Publications/Patents:

Publications	• Sampath Kumar S., **B N Manjunatha Reddy** "Accurate Prediction of Moisture in Paddy towards Smart Farming" Journal of Xidian University, VOL.17, issue 10, page no. 373-377, October 2023. • **B N Manjunatha Reddy,** Somashekar B, Swetha B A "IOT Based car safety system" International Journal of Engineering Research & Technology, VOL.11, Issue 5, page no. 572 -576, 2023.

- Sampath Kumar S., **B N Manjunatha Reddy** "Classification of Rice Varieties Using Machine Learning Techniques for Agricultural Applications**"** European Chemical Bulletin, ISSN 2063- 5346, page no. 189-197, June 2023.
- Shazia Sulthana, **B N Manjunatha Reddy** "Machine Learning Algorithms for Privacy Preserving in Vehicular Adhoc Network" Indonesian Journal of Electrical Engineering and Computer Science(IJEECS), VOL.30 No.2, 2023, PP 1021-1028.
- Sampath Kumar S., **B N Manjunatha Reddy** "Ensemble Modulation Pattern based Paddy Crop Assist for Atmospheric Data" IJCSNS International Journal of Computer Science and Network Security, VOL.22 No.9, September 2022.
- Shazia Sulthana, **B N Manjunatha Reddy** "Whale optimization Algorithm and Block chain Technology for Intelligent Networks" IJCSNS International Journal of Computer Science and Network Security, VOL.22 No.7, July 2022.
- Shazia Sulthana, **B N Manjunatha Reddy** "Block chain Cluster Based Privacy Preserving Scheme for Vehicular Networks" Vidyabharati International Interdisciplinary Research, Special Issue on Recent Research Trends in Management, Science and Technology, ISSN: 2319-4979, August 2021.
- Shazia Sulthana, **B.N.Manjunatha Reddy,** "Efficient IBV privacy preserving scheme in VANET", GIS Science Journal, volume 7, issue 11, pages: 263-270 (2020), ISSN: 1869-9391.
- Shazia Sulthana, **B.N.Manjunatha Reddy, "**New Identity Batch Verification Privacy Scheme in VANET", International Journal of Advanced Networking and Applications, volume 11, 3issue 4, pages: 4354-4358 (2020), ISSN: 0975-0290.
- **B.N. Manjunatha Reddy**, Shanthala S, B.R. Vijayakumar, "16 bit GDI Multiplier Design for Low Power Applications" International conference on smart grids, power and Advanced control Engineering (ICSPACE2017), pp. 372 – 375, DOI: 978-5090-6348-2/17.
- **B.N. Manjunatha Reddy**, Shanthala S, B.R. Vijayakumar, "Performance Analysis of GPU v/s CPU for Image Processing Applications", International Journal for Research in Applied Science &Engineering Technology (IJRASET), ISSN : 2321-9653, Vol. -5, Issue -2, 2017.
- **B.N. Manjunatha Reddy**, Shanthala S, B.R. Vijayakumar, "Power and Area optimization of 8-bit GDI Multiplier in GPU's", International Journal on Advanced

	Computer Theory and Engineering (IJACTE), ISSN : 2319-2526, Vol. -5, Issue -3, 2016. • **B.N. Manjunatha Reddy**, H.N. Sheshagiri, B.R. Vijayakumar, Shanthala S, "Implementation of Low Power 8-Bit Multiplier Using Gate Diffusion Input Logic", *CSE*, 2014, IEEE 17th International Conference on Computational Science and Engineering (CSE) 2014, pp. 1868 -1871, DOI:10.1109/CSE.2014.342. • Shweta Patil and **B.N. Manjunatha Reddy** "Modeling and Analysis of Two Node Network Model with Multiple States in Mobile Networks" in International Journal of Computer Applications Technology and Research Vol.3– Issue 1, pp. 52 - 55, 2014 • **B.N. Manjunatha Reddy**, H.N. Sheshagiri, B.R. Vijayakumar, Shanthala S, "Area optimization of 8-bit Multiplier using Gate Diffusion Input logic" in International Journal of Advanced Trends in Computer Science and Engineering, Vol.2, No.2, pp : 57-61, 2013.
Patents	• Predictive Analysis for optimal Water Management in smart irrigation using Node MCU data.
Book/Book Chapters	• B.N. Manjunatha Reddy, Shazia Sulthana "Deep Neural Networks and Black Widow Optimization for VANETS", Springer Singapore, 02 August 2022, ISBN: 978-981-19-1012-8. https://doi.org/10.1007/978-981-19-1012-8_48. • B.N. Manjunatha Reddy, Sampath Kumar S "Regression Based Approach for Paddy Crop Assists for Atmospheric Data", Springer Singapore, January 2024, ISBN: 978-981-99-7622-5. https://doi.org/10.1007/978-981-99-7622-5

Research and Consultancy:

- Published and presented several papers in International/National journals and conferences.
- Awarded Two Ph.D. candidate under the guidance.
- Received the Award of Excellence in Research-2023
- Guiding two Ph.D. candidates under VTU, Belgaum
- Secured funding from KSCST for projects
- Secured funding from VTU for student projects
- Applied for grants from VGST, DST, ATAL FDP, and other agencies.