Name: **B.B.SHABARINATH**

Designation: Assistant Professor
Department: Electronics & Communication Engineering
Mail I'd: shabarinath_bb@vnrvjiet.in
Experience (in years): 9 Teaching: 8 Research: 6 months Others(if any, specify):

1.Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D.)	Year of passing	Specialization
1	Ph.D	Pursuing (Completed Course Work, Comprehesive Viva and two International Conference Publications)	Hardware Accelerators for Deep Learning Algorithms (NIT Warangal)
2	M.Tech	2013	Embedded System Technology
3	B.Tech	2009	Electronics and Communication
4	Secondary (10+2)	2005	MPC
5	10^{th}	2003	

2. Teaching and Learning:

2.1. Teaching Interests:

- Embedded System Concepts
- Microprocessors and Interfacing
- Embedded real time operating system
- Digital Design Through Verilog HDL
- Switching theory and Logic Design
- Electronic Devices and components
- Programming Languages for Embedded software
- System Design with Embedded LINUX

2.2. Novel Teaching & Learning Techniques adopted: WIT &WIL, POGIL

2.3. Involvement in curriculum updating / Design: NA

3. Co-curricular and Extra-Curricular Activities

3.1. Interests and Hobbies: Update Technical Knowledge and Research Tools

3.2. CCA/ECA Organized: Acted as a Course Coordinator during the one-day blended mode workshop on Python conducted by Indian Institute of Technology Bombay, on 22 June 2019. This training was organised by the Teaching Learning Centre (ICT) at IIT Bombay, funded by the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), MHRD, Govt. of India

3.3. CCA/ECA participated:

- Completed the "Module 3: Communication Skills, Modes, and Knowledge Dissemination" offered by National Initiative for Technical Teachers Training, AICTE.
- Completed "MODULE 7: Creative Problem Solving, Innovation and Meaningful R&D" offered by National Initiative for Technical Teachers Training, AICTE.
- Acted as Primary Evaluator in 'Toycathon, 2021'
- Successfully completed 4 weeks (65 hours) online Lab Workshop on 'FPGA Architecture and Programming using Verilog HDL' jointly organized by Arm Education and NIELIT Calicut during 4thApril 2022 to 30th April 2022.

- Successfully completed, online Training Programme on Digital tools for Writing, Authoring & Reviewing Manuscripts jointly organized during 21st September and 2nd October 2020.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 2020-12-14 to 2020-12-18 at Koneru Lakshmaiah Education Foundation.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "FPGA Based Deep Learning Applications in Signal Processing" from 2021-07-05 to 2021-07-09 at KLE Technological University.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Machine Learning Techniques In VLSI Design" from 2021-07-26 to 2021-07-30 at MS Ramaiah Institute Of Technology.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "VLSI Design Techniques and its Applications in AI/ML" from 15/11/2021 to 19/11/2021 at Thapar Institute of Engineering & Technology, Patiala.
- Participated in a two-week Online Faculty Development Programme on “System Design Methodologies for Embedded, IoT, AI, & HPC using Intel FPGA” jointly organised by Electronics and ICT Academies held from 19 - 30 April, 2021 under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” of the Ministry of Electronics and Information Technology (MeitY), Government of India. He/she has also taken part in the hands on sessions during the program. We wish him/her a very good luck for his/her future endeavour. This Faculty Development Programme is at par with other Quality Improvement Programmes
- Participated in a two weeks (40 hours) online Faculty Development Programme on “Deep Learning & Applications (Parallel Architectures)” jointly organized by the Electronics and ICT Academies at IIT Guwahati, IIT Kanpur, IIT Roorkee, MNIT Jaipur, NIT Patna, NIT Warangal and PDPM IIITDM Jabalpur during Aug 23- Sept 3, 2021 under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” of the Ministry of Electronics and Information Technology (MeitY), Government of India. She/He has successfully completed all the requirements of the programme with an excellent grade. The programme is recognized by AICTE/UGC.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on " BLENDED AND FLIPPED APPROACH IN TEACHING AND LEARNING" from 2020-8-24 to 2020-8-28 at National Institute of Technical Teachers' Training and Research, Chennai.
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on " Design Thinking" from 2020-9-21 to 2020-9-25 at MNIT Jaipur.

3.4. Counseling and Mentoring Activity: Mentor for 1st, 2nd, and 3rd year students

3.5. Committees involved in: NA

Department level: WIT&WIL coordinator,IoT and Embdded Systems SIG NBA Criterian File, M. Tech Embedded Systems Projects File

Institute Level: IoT Projects, Hackathon Evaluator, MoU with RedPine Signals, MODROBS file,

4. **Conference / Workshop / Seminar / Guest Lectures :**

4.1.Conducted:

4.2.Attended:

- Attended online IEEE Blended Learning course on " IOT NODE DEVELOPEMENT using ARM" and successfully completed with 82%
- DL0101EN: Deep Learning Fundamentals with Keras (IBM Certified) by edX
- PH 5 26x: Using Python for Research (HavardX), on online initiative of Harvard University by edX
- DL0110EN: Deep Learning with Python and PyTorch (IBM Certified) by edX
- OTP-AWSD5: AWS IoT: Developing and Deploying an Internet of Things offered by AWS at edX
- Deep Learning Specialization by Coursera
- Developing FPGA-accelerated cloud applications with SDAccel: Practice by Coursera
- Developing FPGA-accelerated cloud applications with SDAccel: Theory by Coursera
- Introduction to Tensorflow for Artificial Intelligence, Machine Learning and Deep Learning by Coursera
- Linear Algebra by NCLAB (Learning for Industry 4.0)

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:

- Acted as resource person for the two-day workshop on "Internet of Things" conducted during the event of VNRVJIET's Annual Technical Symposium -Convergence -2K21- Experience Innovation on 15th and 16th December, 2021 and delivered lecture sessions on "Introduction to IoT" at VNRVJIET
- Acted as speaker on topic "Python for Machine Learning Algorithms" on 29th and 30th December, 2021 at IEEE SPS Seasonal School on "Recent advances in Artificial Intelligence for Signal Processing".

5.2. Articles/Chapterspublished inBooks:

5.3. Bookspublishedassingleauthororaseditor:

5.4. Projects Guided :

a) UG :2

b) PG :3

5.5. Research Interests : Internet of Things,Machine Learning and Embedded Devolopment

5.6. Ph.Dstudents :

a) Enrolled :

b) Submitted:

c) Awarded:

5.7. Papers published in reviewed journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Design and Implementation of Home Monitoring System Using RF Technology	International Journal of Advances in Electrical And Electronics Engineering. Volume 1 Number 2,	2319-1112	1.8896	International

		Pages Number – 59-68.			
2	Analysis Of PID Controller For Second Order System Using NI Labview	International Journal of Emerging Technology and Advanced Engineering Volume 1, Issue 2, December 2011	2250-2459	1.76	International
3	A Embedded System For Multiplatform Communication Of Real Time Data Using Vx Works	International Journal of Emerging Technology and Advanced Engineering Volume 1, Issue 2, December 2011	2250-2459	1.76	International

5.8. Papers presented at National / International Conferences :

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Convolutional Neural Network based Traffic-Sign Classifier Optimized for Edge Inference	TENCON-2020	International	16-19 Nov. 2020
2	Custom-IP for Gradient Descent Optimization based on Hardware/Software Co-design Paradigm	VDAT-2020	International	23-25 July 2020
3	A Comparative Study of Epileptic Seizure Detection Framework using SVM and ELM	ICCS-219	International	15-17 May 2019
4	Timing and Synchronization for explicit FSM based Traffic Light Controller	IACC-2017	International	5th - 7th JAN 2017
5	MODBUS communication in microcontroller based elevator controller	CARE-2013	International	16-18 Dec 2013

5.9. Sponsored research Projects:

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

5.10 Consultancy Projects:

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

6. Awards / Honors received:

- Got top 1% and Gold Medal in 12 week NPTEL online certification course "Internet of Things" during July to October 2018
- Qualified in UGC NET held in DEC 2018 with 99.2 percentile
- Won "Intel Award" for Quiz conducted by E&ICT Academy, Indian Institute of Technology Guwahati
- Got Silver Medal in 12-week NPTEL online certification course on "C Based VLSI Design" during July to October 2021
- Got Siver Medal in 12-week NPTEL online certification course on "NBA Accreditation and Teaching and Learning in Engineering (NATE)" during January to April 2022

7. Motto: "Karmanyeva Samsidhahaa!"