| Name of Faculty   | Dr. N.ALIVELU MANGA<br>Associate Professor<br>Regular  |                                 |  |
|---|--|---------------------------------|--|
| Designation   |  |                                 |  |
| Nature of Job/Appointment   |  |                                 |  |
| Date of Joining   | 28 - 05 - 2009   |                                 |  |
| E-mail  | alivelumanga_ece@cbit.ac.in  |                                 |  |
| Education Qualifications  | Name of the Degree   | Class                           |  |
| Ph. D   | Doctor of Philosophy (ECE)   | Awarded                         |  |
| PG  | M. Tech. (ECE)   | First Class with<br>Distinction |  |
| UG  | B.Tech (ECE)   | First Class with<br>Distinction |  |
| Work Experience   |  |                                 |  |
| Teaching  | 18 Years   |                                 |  |
| Research  | 06 years   |                                 |  |
| Industry  |  |                                 |  |
| Others  |  |                                 |  |
| Area of Specialization  | VLSI Design, Digital Systems   |                                 |  |
| Professional Memberships<br>Responsibilities held at Institution<br>Level   | <ul> <li>Member,IEEE-92411755</li> <li>1. R&amp;D Coordinator for ECE Department from 11.01.2019 to 30.11.2019.</li> <li>2. Member, Academic Council from 16.01.2019 to 30.01.2020.</li> </ul>   |                                 |  |
| Responsibilities held at Department<br>Level  | <ol> <li>Worked as Department NBA Coordinator for ME(ES&amp;VLSID)<br/>Programme (NBA Team visiting dates:13-15 Dec 2019)</li> <li>Member, Board of Studies</li> <li>Member, Program Assessment Committee for ME (ES&amp;VLSID)<br/>Programme.</li> <li>Member, Program Assessment Committee for BE (ECE)<br/>Programme.</li> <li>Member, Department Advisory Board</li> <li>Coordinator, Teaching Learning Process-CCC-MCC<br/>Committee</li> <li>Member, Course Expert Group</li> <li>In-charge for ES&amp;VLSID Lab</li> <li>ME(ES&amp;VLSID) Programme Coordinator</li> <li>Member, Department Research Committee</li> <li>Department Incharge for MoU with AMD for Co-Op program (ME-<br/>ES&amp;VLSID &amp; UG)</li> <li>Department ISO Incharge (2015-16 to 2019-20)</li> </ol> |                                 |  |
| Research Guidance   |  |                                 |  |
| Awards Received   | Best Teacher Award in 2019   |                                 |  |
| Courses Handled at Under Graduate / Post Graduate Level.  | Electronic Devices, Analog Electronics, Digital System Design, VLSI<br>Design, Low power VLSI Design, Digital IC Design, CMOS VLSI Design<br>and Analog Mixed Signal VLSI Design   |                                 |  |
| No. of Papers Published   | National Journals –International JournalsNational Conference –02International Conference –02   |                                 |  |
| Projects Carried out  | Title: A Local Short Term Model for Forecasting Ionospheric<br>Scintillations for GNSS Applications over Indian Region Sponsored by :<br>ISRO, RESPOND Amount:17.66 Lakhs, Period: 3 years :(11 Mar<br>2016-10 Mar 2019), Role: Co-PI  |                                 |  |
| Patents   |  |                                 |  |
| Technology Transfer   |  |                                 |  |
| Invited Speaker   |  |                                 |  |
| No. of Books/Chapter Published with<br>details<br>Details of Short-Term Training<br>Programs/Faculty Development<br>Programs/Seminars/Workshops.Other<br>Trainings (Attended and/or | <ol> <li>Successfully Organized a One Week Faculty Development<br/>Programme on "IoT for Emerging Applications" during 04th – 08th<br/>February, 2020 in association with Electronics &amp; ICT Academy IIT<br/>Guwahati at CBIT.</li> </ol>   |                                 |  |

Organized).

Guwahati at CBIT. 2. Successfully completed One Week Faculty Development

Programme on "Entrepreneurship, Incubation and Innovation" from June 23 - June 29, 2020 organized by Teaching Learning Centre, Ramanujan College, University of Delhi and sponsored by Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.

- Successfully completed One Week Faculty Development Programme on "Open Source Tools for Research" from June 08 -June 14, 2020 organized by Teaching Learning Centre, Ramanujan College, University of Delhi and sponsored by Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching.
- Successfully Completed a one week International Online Knowledge Development Program on "Challenges and Advancements in the Design of IoT, Embedded and VLSI Systems: A Researchers View" organized by Department of ECE, Gudlavalleru Engineering College during 8-06-2020 to 13-06-2020.
- Attended a 5-Day STTP on "MATLAB based Teaching –Learning in Mathematics, Science and Engineering" organized by the Department of Electronics Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai and B&R Automation Pvt Ltd Pune during 8-12 June2020.
- Attended a short term online course on "Role of Artificial Intelligence in Electronics" sponsored by ISTE during 01<sup>st</sup> -05th June, 2020 held at Sathyabama Institute of Science and Technology, Chennai, India.
- Attended and cleared the assessment test in four day faculty development programme on "Machine learning for Signal Processing and VLSI", Organized by Centre for Artificial Intelligence and Machine Learning, Department of Electronics and Communication Engineering, Anurag University, Hyderabad, India during 05-06-20 to 08-06-2020
- 8. Successfully Completed a one week FDP on "Outcome Based Education and NBA Accreditation Process" at CBIT during 28-05-2020 to 01-06-2020.
- Participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28<sup>th</sup> April to 22nd May 2020 during COVID-19 nationwide lockdown.
- Attended a 5-Day STTP on "MATLAB based Teaching –Learning in Mathematics, Science and Engineering" organized by the Department of Electronics Engineering, Ramrao Adik Institute of Technology, Nerul, Navi Mumbai in collaboration with DesignTech Systems Pvt. Ltd., Mumbai during 18th to 22nd May 2020.
- 11. Successfully completed the 'Effective and Efficient Online Teaching in the Age of Corona, A Hands On Workshop' on 17 May 2020 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.
- 12. Successfully Completed "Introduction to Electronics" a 7-Week online non-credit course authorized by Georgia Institute of Technology and offered through Coursera on 17-05-2020.
- Successfully Completed "Peer-to-Peer Protocols and Local Area Networks" a 5-Week online non-credit course authorized by University of Colorado and offered through Coursera on 14-05-2020.
- 14. Successfully Completed "Packet Switching Networks and Algorithms" a 5-Week online non-credit course authorized by University of Colorado and offered through Coursera on 14-05-2020.
- 15. Successfully Completed "Fundamentals of Network Communications" a 5-Week online non-credit course authorized by University of Colorado and offered through Coursera on 13-05-2020.
- 16. Successfully Completed "TCP/IP and Advanced Topics" a 5-Week online non-credit course authorized by University of Colorado and offered through Coursera on 13-05-2020.
- 17. Successfully Completed "Programming for Everybody (Getting Started with Python)", a 7-Week online non-credit course authorized by University of Michigan and offered through Coursera on 08-05-2020.
- 18. Successfully Completed "The Bits and Bytes of Computer Networking" a 6-Week online non-credit course authorized by Google and offered through Coursera on 07-05-2020.

- 19. Successfully Completed "AI for Everyone" a 4-Week online noncredit course authorized by Deeplearning.ai and offered through Coursera on 07-05-2020.
- 20. Successfully Completed "Wireless Communications for Everybody", a 6-Week online non-credit course authorized by Yonsei University and offered through Coursera on 07-05-2020.
- 21. Successfully completed a 12 Week NPTEL course "NBA Accreditation and Teaching Learning in Engineering (NATE)", on the SWAYAM platform (swayam.gov.in), during the Jan-Apr 2020 semester.
- 22. Successfully completed the Online Certification Skill Development Program on "Implementation and Verification in VLSI Design" held from 27th Apr to 1st May 2020, by Sandeepani School of Embedded System Design, Bangalore.
- 23. Attended a virtual classroom training on "ASIC Physical Design and Verification" conducted by Excel VLSI Technologies, Bangalore during 27-04-2020 to 02-05-2020.
- 24. Attended a Training Program on "STTP through ICT mode on NBA Accreditation" conducted by NITTR Kolkata during 22nd-26th April 2019
- 25. Successfully completed a 4 Week NPTEL course "GNSS", on the SWAYAM platform (swayam.gov.in), during the Jan-Apr 2019 semester
- 26. Successfully completed a 12 Week NPTEL course "CMOS Digital VLSI Design", on the SWAYAM platform (swayam.gov.in), during the July-Sept 2019 semester
- 27. Successfully completed an 8 Week NPTEL course "Hardware Modeling using Verilog ", on the SWAYAM platform (swayam.gov.in), during the Aug.-Nov. 2019 semester.

## International Journals from the Year 2017

- G. Sai Teja, P. Sathish, N. Alivelu Manga (2020) "Development of Voice Assisted Application for Real-Time Refrigerator Door control", Journal of Xidian University, VOLUME 14, ISSUE 7, ISSN No:1001-2400.
- V. V. Satyanarayana Tallapragada, N. Alivelu Manga, G. V. Pradeep Kumar, M. Venkata Naresh (2020) "Mixed image denoising using weighted coding and non-local similarity", SN Applied Sciences, A Springer Nature Journal, Volume 2/issue2 2523-3963.
- **3.** N.Alivelu Manga (2019), "Performance Analysis of Acquisition Algorithms for Navic", International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249 8958, Volume-9 Issue-2.
- N. Alivelu Manga, E.Chandrasekhar, P. Chandra Sekhar (2019), "Design and Simulation of 12-bit Current Steering DAC", International Research Journal of Engineering and Technology (IRJET), VOLUME: 06 ISSUE: 07, -ISSN: 2395-0072.
- **5.** Sathish Pasika, D. Krishna Reddy, N. Alivelu Manga(2019)," Development of Raspbian kernel Customization for Automatic Railway Level Crossing Application", International Journal of Recent Technology and Engineering (IJRTE),ISSN: 2277-3878, Volume-8, Issue-1C.
- **6.** Ms. P. Swathi, Sri J.Balakrishna, and N. Alivelu Manga, (2018) "Design and Synthesis of Combinational Circuits using Reversible Logic Gates", International journal of research in electronics and computer engineering, vol. 6 Issue 2. ISSN: 2393-9028
- Sri J.Balakrishna, K. Suryateja, N. Alivelu Manga,(2018) "Development and Testing of ARNICC429 IP using FPGA for Navigation System, 1387-90", International journal of research in electronics and computer engineering, vol. 6 Issue 2, ISSN: 2348-2281

## International Conferences from the Year 2017

- V. V. Satyanarayana Tallapragada, N. Alivelu Manga, G. V. Pradeep Kumar, M. Venkata Naresh(2020), "Mixed image denoising using weighted coding and non-local similarity", Second International Conference on Advances in Intelligent Systems, Soft Computing & Optimization Techniques 01 -02, April 2020.Malaysia.
- S.Greeshma sai, N. Alivelu Manga, P. Chandra Sekhar (2020), "Design and Simulation of FinFET based digital circuits for low power applications", 2020 IEEE International Students' Conference on Electrical, Electronics and Computer Science-, Bhopal, 978-1-7281-4862-5, 22-23 February 2020.
- Abhiram MSD,Jyothsnavi Kuppili, N. Alivelu Manga(2020), "Smart Farming System using IoT for Efficient Crop Growth",2020 IEEE International Students' Conference on Electrical, Electronics and Computer Science-, Bhopal,978-1-7281-4862-5,22-23 February 2020.
- 4. Ayesha Samreen, P. Sathish, N.Alivelu Manga (2019), "Low Cost IoT Based Emission Monitoring System, for Thermal Power Plants ", IEEE- Innovations in Power and Advanced Computing Technologies (i-PACT) 978-1-5386-8190-9.
- 5. K. Lakshmanna, N. Alivelu Manga and A.D. Sarma(2019),"Forecasting of Ionospheric Scintillations by using Statistical Models", Symposium-NSSS 2019, SPPU, Pune.
- K. Lakshmanna, N. Alivelu Manga, A. D Sarma (2018), "Analysis of Ionospheric Delay Effects on IRNSS-GPS Receiver Coordinates", 2018 IEEE Indian Conference on Antennas and Propogation (InCAP), 978-1-5386-7070-6.
- Ms P.Sriravali, Sri J.Balakrishna, Sri P.Chandrasekhar, N. Alivelu Manga, (2018) "Design and Implementation of Low Noise Amplifier (LNA) for IRNSS Receiver", Proceedings of the International Conference on Inventive Research in Computing Applications (ICIRCA 2018)

ISBN: 978-1-5386-2456-2.

- Sri J.Balakrishna, Mr. Himamsu Marellapudi,N. Alivelu Manga(2018),"IOT based status tracking and controlling of motor in agricultural Farms",5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON), 978-1-5386-5002-8.
- N.Alivelu Manga, K. Lakshmanna, A.D. Sarma, N.V. Koteswara Rao and Tarun K.Pant(2017), "Effect of Amplitude Scintillations on the Tracking Error of IRNSS Receiver for Indoor Navigation Applications ",IEEE International WIE Conference on Electrical and Computer Engineering (WIECON-ECE)978-1-5386-2621-4, WIT, Dehradun, India