Name of Faculty	Dr Tummala Aravinda Babu	
Designation	Assistant Professor	
Nature of Job/Appointment	Regular	
Date of Joining	12-07-2008	
E-mail	aravindababu_ece@cbit.ac.in	

Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (ECE)	Awarded
PG	M.E (Communication and Signal Processing)	First with Distinction
UG	B. E. (ECE)	First

Work Experience

Teaching	16 Years
Research	01 years
Industry	--
Others	--

Area of Specialization	5G communication, Chanel coding and Signal Processing
Professional Memberships	Senior Member in IEEE, IEEE signal processing society member (No: 92512079), FIETE (F-502566), member in IAENG (No. 322783)
Responsibilities held at Institution Level	1. Worked as Co-Incharge, Academics and Examinations, from 18-10-2017 to 10-03-2020. 2. In-charge, LCD projector and AV systems. 3. In-charge, MATLAB software. 4. Disciplinary Committee convener for SHRUTHI 2020 Institute Annual Day. 5. Co-converner for Academic Committee for Shruthi -2018 Celebrations. 6. Co- Incharge for IEEE Student Branch in CBIT. 7. Advisor, IEEE signal Processing Society(IEEE SPS)
Responsibilities held at Department Level	1. Member Course Expert Group (CEG) 2. Lab Incharge for Digital Signal Processing Lab 3. Equivalent subject Incharge 4. Class Incharge 5. Marks Incharge 6. Attendance Incharge
Research Guidance	ME projects- 08
Awards Received	
Courses Handled at Under Graduate / Post Graduate Level.	**PG:** 1. Coding theory and techniques 2. DSP processor and architecture 3. Advanced Digital Signal Processing **UG:** 1. Integrated Circuits and Applications 2. Digital Signal Processing 3. Coding Theory and Techniques 4. Digital Image Processing 5. Control System 6. Linear IC and Applications

No. of Papers Published	National Journals – 00	International Journals – 08
	National Conference – 00	International Conference – 02

Projects Carried out	--
Patents	--
Technology Transfer	--
Invited Speaker	Delivered an expert talk on "**DSP - Filter Design**" on national level Faculty Development Programme (FDP) on "Signals Systems and Transform Techniques (SSTT 2021)" during 22nd - 27th November, 2021 organized by MVSR Engineering College (Autonomous), Nadergul, Hyderabad.

No. of Books/Chapter Published with details	--

Certification:

"Certified LabVIEW Associate Developer (CLAD)" which is an internationally recognized certification by National Instruments (NI).

Attended:

1. Attended a one day training program by Maple soft and Binary Semantics at CBIT and completed "Maple soft Product Overview – Level1" in June 2017.
2. Attended a 4-day Faculty development course for Certified LabVIEW Associate Developer organized by Department of ECE during 21st –24th Aug' 17.
3. Attended a 1-week workshop on "My-DAQ and My-RIO" from 7th to 11th November 2017 at CBIT.
4. Attended a 10-day FDP on "Machine Learning" organized at CSE department of GITAM School of technology, GITAM (Deemed to be University), Hyderabad by Electronics & ICT Academy NIT Warangal during 28th May - 06th June 2018.
5. Attended a three week refresher course on "Internet of Thing" conducted by UGC-HRDC, JNTUH during 03rd to 22nd Dec, 2018.
6. Attended a "Significance of MATLAB in Applications of Emerging Technologies" conducted by CBIT on 26-06-2019.
7. One week Faculty Development Programme on "IoT for emerging applications" organized by E&ICT Academy IIT Guwahati in association with Dept. of ECE, CBIT held during 04 – 08 February 2020 at CBIT.
8. Attended a One Week Online Faculty Development Program on "Cyber Security" from 7th July to 12th July 2020 jointly organized by Dept. of CSE MGIT and Dept. of MCA CBIT in association with Supraja Technologies.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other Trainings (**Attended and/or Organized**).

9. Attended a one week FDP on "Design Thinking in Engineering Education" secured Second Prize in the project presentation organized by Centre for Presenting and Design Thinking (CPADT) VNRVJIT, Hyderabad from 15to 19th June, 2020.
10. Attended a 2-day online FDP on "Effective Technical Report Writing using LaTex" organized by Dept. of ECE, MGIT on 8th and 9th June 2020.
11. Attended a one week Faculty Development Program on "Outcome based Education and NBA Accreditation Process (UG)" from 28-05-20 to 01-06-20 organized by CBIT.
12. Attended a one week Faculty development program on "Outcome Based Education" from 11th to 15th May 2020 sponsored by AICTE under Margadarshan scheme.
13. Successfully completed the Online Course on "Yoga and Meditation" Conducted by Yoga Club & Extension Activity - Department of BBA (CA), Hindusthan College of Arts and Science, Coimbatore.
14. Attended a one day training on "CO-PO attainment computation and Outcome Analysis" organized by InPods Ed-Tech on 13th June 2020.
15. Attended a online Training Program for Two days on "Android App Development for Embedded System" under Texas Instruments University Program in association with EdGate Technologies Pvt Ltd Bangalore on 25th and 26th April 2020.
16. Attended a online Training Program for Three days on "Ultra Low Power System Design" Under Texas Instruments University Program in association with EdGate Technologies Pvt Ltd Bangalore from 17th to 19th April 2020.
17. Attended a one week online Training Program "Design and Implementation of DSP using Xilinx" from 04th to 08th May 2020 organized by Research & Development Dept., Tech FLUENT Solutions Pvt. Ltd. Hyderabad
18. Attended a One week online Faculty development program on "Research Opportunities in Image Processing and Machine Learning" from 29th June 2020 to 3rd July 2020 organized by Dept. of ECE, CBIT.

Webinars:

1. Attended a 17 Institution's Innovation Council(IIC) online session on conducted by MHRD's innovation cell, New Delhi during 28th April to 22nd May,2020.
2. Participated in the one day National Webinar on "Statistical Analysis as an Interface In Engineering Problems" organized by the Department of Mathematics, CBIT on 13th July 2020.
3. Participated in the webinar on "Present Trends and Research scopes in 5G Wireless Communications" conducted by the Department of Electronics and Communication Engineering, GPREC, Kurnool on 27th and 28th June, 2020.
4. Participated in webinar on "Publishing Research Articles in Scopus Indexed Journals" conducted by CBIT - School of Management Studies on 24th June, 2020.
5. Attended "Leadership Talk" with Mr. ShridharVenkat, CEO (Akshay Patra Foundation) held on 20th Jun, 2020 by MHRD's Innovation Cell.
6. Attended "India First Leadership Talk webinar" by Prof D. P. Singh, Chairman UGC broadcasted on 9th May, 2020 by MHRD's Innovation Cell.
7. Attended "Leadership Talk" by DrNilesh N Oak, Expert (Indian Civilization & History) broadcasted on 30th May, 2020 by MHRD's Innovation Cell.
8. Attended "Leadership Talk" by Mr Mahesh Babu, CEO Mahindra Electric Mobility Ltd. broadcasted on 4th June, 2020 by MHRD's Innovation Cell.
9. Attended a Webinar on "Research Challenges & Career Opportunities in VLSI" held on 6th June 2020 organized by Dept. of ECE, NBKR Institute of Science and Technology, Vidyanagar, Nellore, AP.
10. Attended a Webinar on "Awareness on IEEE" on 30th April 2020 organized by IEEE Hyderabad Section.

Coursera Courses / Online Certification courses:
1. A 7-Week online Course on "Programming for Everybody (Getting Started with Python)" organized by University of Michigan through "Coursera Online Platform".
2. A 4-week online Course on "AI for Everyone" organized by deeplearning.ai through "Coursera Online Platform".
3. A 4-week online Course on "Cyber Security and Internet of Things" organized by University System of Georgia through "Coursera Online Platform".
4. A 3-week online Course on "Digital Signal Processing 2: Filtering" organized by EPFL through "Coursera Online Platform".
5. A 6-week online Course on "Wireless Communication for everybody" organized by Yonsei University through "Coursera Online Platform".
6. A 7-week online Course on "Introduction to Electronics" organized by Georgia Institute of Technology through "Coursera Online Platform".
7. A 4-week online Course on "Digital Signal Processing 3: Analog and Digital" organized by EPFL through "Coursera Online Platform".
8. Online certification course on "Core 1" by National Instruments (NI) sponsored by AICTE.
9. Online certification course on "Core 2" by National Instruments (NI) sponsored by AICTE.
10. Online certification course on "Core 3" by National Instruments (NI) sponsored by AICTE.
11. Online certification course on "Creating Web applications using LabVIEW NXG" by National Instruments (NI) sponsored by AICTE.
12. Online certification training course on "MATLAB Onramp" by MathWorks training services by AICTE.
13. Online certification training course on "Machine Learning Onramp" by MathWorks training services by AICTE.

Covid Awareness Programs:
1. Completed "Coronavirus - (COVID-19) Awareness Program" Organized by National Service Scheme (NSS), JNTUK College of Engineering, Vizianagaram on 17th May 2020.
2. Completed "Coronavirus - (COVID-19) Awareness Program" Organized by National Service Scheme (NSS), JNTUH College of Engineering, Jagtial on 28th May 2020.

Details of Journal Publications/ Conferences (**National and International**)

International Journals from 2018:

1. **T. Aravinda babu**, K. Deergha Rao, "Performance Analysis of Channel Estimation techniques for 5G Massive MIMO-OFDM System", International Journal of systems, control and communications (IJSCC), pp: 116-131, Vol. 14, No. 2, Jan, 2023. (Inder science Journal) (Scopus).

2. **T. Aravinda babu**, K. Deergha Rao, "Performance Analysis of Channel Estimation for LDPC Coded 5G Massive MIMO-OFDM System", Journal of Design Engineering (Toronto) ISSN: 0011 9342, Volume-9, December, 2021.(Scopus).

3. **T. Aravinda Babu**, Koiloth SRS Jyothsna, "Performance Analysis of Video Steganography Using DWT-BCH Method", International Journal of Electrical Engineering and Technology (IJEET), Volume 12, Issue 6, pp. 242-250, June 2021. (Scopus).

4. Koiloth SRS Jyothsna**, T. Aravinda Babu**, Joseph Michael Murray, "Possible Solutions for Interference Coordination in HETNETS of LTE-A", International Journal of Electrical Engineering and Technology (IJEET) Volume 12, Issue 5, pp. 171-178, May 2021. (Scopus)

5. **T. Aravinda Babu**, K.S.R.S.Jyothsna, "IoT Based Human Health Monitoring System", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-9 Issue-2, July 2020. (Scopus Indexed Journal)

6. K.S.R.S. Jyothsna, **T. Aravinda Babu** and Joseph Michael Murray, "PERFORMANCE COMPARISON OF TECHNIQUES FOR INTERFERENCE COORDINATION IN HETNETS OF LTE-A" in "International Journal of Electrical Engineering & Technology (IJEET), Volume 11, Issue 4, June 2020, pp. 141–149; ISSN Print: 0976-6545 and ISSN Online: 0976-6553. (Scopus Indexed Journal)

7. **T. Aravinda Babu**, "IOT Based Home Automation System using Node MCU and MQTT", IJMECE, ISSN: 2321-2152, Volume No.-7, Issue No.-3, May, 2019(UGC approved No: 62465).

8. **T. Aravinda Babu** and K.S.R.S. Jyothsna, "IOT BASED SMART VEHICLE AND SMART PARKING SYSTEM" in UGC approved International Journal of Electrical Engineering & Technology (IJEET), ISSN Online: 0976-6553 (UGC approval Number: 43685), Volume 09, Issue 3, May-June 2018.

International Conferences from 2018:

9. **T. Aravinda Babu** and K. Deergha Rao, "Performance Analysis of LDPC Coded Massive MIMO-OFDM System", IEEE International Conference for Emerging Technology (INCET- 2020) held on 05th - 07th June 2020 at Belagavi, Karnataka, India.

10. **T. Aravinda Babu** and K. Deergha Rao," Performance Analysis of QC-LDPC and Polar Codes for eMBB in 5G Systems, IEEE International Conference on Electrical, Electronics and Computer Engineering (UPCON-2019), 8-10 Nov. 2019 at ALIGARH, India, India.