



## Dr. Mohan Bansal, SMIEEE

<https://sites.google.com/view/mohanbansal>

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CONTACT INFORMATION	1102-T3A, BTW Grand Square Appartment, Sector-61, Kundli, Sonipat, Haryana, India 131028	(+91)-7754856788 <a href="mailto:mohanbs.iitk@gmail.com">mohanbs.iitk@gmail.com</a> <a href="mailto:bmohan@iiitsonapat.ac.in">bmohan@iiitsonapat.ac.in</a>
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RESEARCH INTEREST	Biomedical signal processing, Speech signal processing, AI in Healthcare, Machine learning, Deep Learning, Computer Vision.
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PROFESSIONAL AFFILIATIONS	Google Scholar: <a href="https://www.scholar.google.co.in/mohanbansal">https://www.scholar.google.co.in/mohanbansal</a> SCI Profile: <a href="https://sciprofiles.com/profile/mohanbansal">https://sciprofiles.com/profile/mohanbansal</a> Scopus Profile: <a href="https://scopus.com/mohanbansal">https://scopus.com/mohanbansal</a> IEEE Profile: <a href="https://www.ieeexplore.ieee.org/mohanbansal">https://www.ieeexplore.ieee.org/mohanbansal</a> LinkedIn Profile: <a href="https://www.linkedin.com/in/mohanbansal">https://www.linkedin.com/in/mohanbansal</a> Orcid Profile: <a href="https://www.orcid.org/0000-0003-0524-8251">https://www.orcid.org/0000-0003-0524-8251</a> Research Gate: <a href="https://www.researchgate.net/mohanbansal">https://www.researchgate.net/mohanbansal</a> Vidwan Profile: <a href="https://vidwan.inflibnet.ac.in/mohanbansal">https://vidwan.inflibnet.ac.in/mohanbansal</a> YouTube: <a href="https://www.youtube.com/mohanbansal">https://www.youtube.com/mohanbansal</a>
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### EDUCATION **Indian Institute of Technology Kanpur, Kanpur India**

Ph.D , July 2013 - Jan 2020

- Stream: Signal Processing, Communications & Networks (SPCOM),
  - Thesis Topic: *Multicomponent amplitude and frequency modulated signal model for speech signal processing.*
  - Supervisor: Prof. Pradip Sircar
  - CGPA/Score : 8/10

### **National Institute of Technology Kurukshetra, Haryana India**

M.Tech, July 2009-June 2011

- Stream: Electronics & Communication,
  - Thesis Topic: *Two channel paraunitary filter bank based on linear canonical transform.*
  - Supervisor: Prof. Sandeep Santosh
  - CGPA/Score : 8.17/10

### **Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal India**

BE, July 2004- May 2008

- Stream: Electronics and Communication,
  - Major Project (Hardware): Wireless spy robot
  - CGPA/Score : 73.38%

PROJECT  
EXPERIENCE

**Indian Institute of Technology Kanpur**

Mar 2019-Nov 2019

- **Project Title:** Spatial modulation and NOMA design for 5G wireless system
- **Job Responsibility:** Deep learning and deep reinforcement learning for dynamic power allocation in wireless network

PROFESSIONAL  
EXPERIENCE

**Teaching Assistant (TA) and Tutorship**

July 2013- June 2019

*Indian Institute of Technology Kanpur*

- Introduction to Electronics ESC201 ( Lab Tutor)
- Introduction to Electronics ESC201 ( Theory Tutor)
- Smart Antennas for Mobile Communications EE643
- Mathematical Methods in Signal Processing EE601
- Introduction to Electrical Engineering ESO210 (Lab)
- Principles of Communications EE320

**Assistant Professor**

1. *IIT Sonapat, Haryana*

Sep 2023 - Present

Theory	Lab
Fundamentals of Electrical and Electronics Engineering	Fundamentals of Electrical and Electronics Engineering
Digital Electronics	Digital Electronics
Analog Electronics	Analog Electronics

2. *VIT-AP Universtiy, Amaravathi A.P.*

Jan 2020 - Sep 2023

Theory	Lab
Signals and System	Digital Logic and Microprocessor
Digital Logic Design	Digital Logic Design
Principles of Electronics Engineering	Principles of Electronics Engineering
Principles of Electrical Engineering	Principles of Electrical Engineering
Fundamentals of Electrical and Electronics Engineering	Communication System

3. *ITM Universtiy, Gwalior M.P.*

Mar 2012 - July 2013

Theory	Lab
Basic Electronics	Basic Electronics
Network Analysis and Synthesis	Network Analysis and Synthesis
Analog and Digital Communication	Analog and Digital Communication

4. *SRGI, Jhansi U.P.*

July 2011 - Mar 2012

Theory	Lab
Digital Circuit and System	Digital Circuit and System
Control System	Control System

PROFESSIONAL  
AFFILIATION

- IEEE Senior Member, IEEE Young Professional (Membership Number: 94900189)

PUBLICATIONS

**Patent**

1. Kodali Radha, **Mohan Bansal**, "System and Method for Speech Recognition in Children using DirichNet " Indian Patent, Application Number: 202441036477 17 May 2024 (Published).

2. Shaik Mulla Shabber, **Mohan Bansal**, "A Speech Recognition, and Assistive System for users with Speech Impairment, and Method Thereof", Indian Patent, Application Number: 202341088168 12 Jan 2024 (Published)
3. Kodali Radha, **Mohan Bansal**, "System and Method for Diagnosis of Hypoxic Ischemic Encephalopathy (HIE) from Infant Cry Sounds " Indian Patent, Application Number: 202341087285 05 Jan 2024 (Published).
4. **Mohan Bansal**, Rajeev Sharma "VerdantGuard: An AI-IoT Guardian for Plant Disease Detection", Indian Patent Application Number: 202341057382 08 Sep 2023 (Published).
5. **Mohan Bansal**, "Phoneme Classification using the Modulated Signal Model", Indian Patent Application Number: 202341046386 , 01 Sep 2023 (Published).
6. Kodali Radha, **Mohan Bansal**, "Augmented Reality-Based Speech Therapy for Children with Developmental Verbal Dyspraxia (DVD)" Indian Patent Application Number: 202341032824 , 23 June 2023 (Published)
7. Kodali Radha, **Mohan Bansal**, "System and Method to Correct Mispronunciations in Non-Native Speech in Children" Indian Patent Application Number: 202341032532, 23 June 2023 (Published)
8. **Mohan Bansal**, Prateek Jain, Rajeev Sharma, "Social Distancing Alert System using Deep Learning", Indian Patent Application Number: 202141026734, 25 June 2021 (Published).

#### Peer Reviewed Journals

1. **Mohan Bansal**, Sudhansu Shukla, Ram Bilas Pachori "Deep Learning Approaches to Speech Emotion Recognition: Leveraging MFCC Images and Data Augmentation Techniques", *Speech Communication, Elsevier*, 2025 (Submitted).
2. Ramesh Saha, Sanjeev Kumar Bharadwaj, Sohail Saif, Suparna Biswas, **Mohan Bansal**, Prateek Jain, Linga Reddy Cenkeramaddi "SWAST KHOJ: An IoT-Driven Real-Time Health Monitoring System Prototype", *IoT Journal, Elsevier*, 2025 (Revision Submitted).
3. Shaik Mulla Shabber, **Mohan Bansal**, "Early identification of bulbar motor dysfunction in ALS: An approach using AFM signal decomposition", *Speech Communication, Elsevier*, 103246, 2025.
4. Shaik Mulla Shabber, **Mohan Bansal**, "Temporal feature-based approaches for enhancing phoneme boundary detection and masking in speech", *International Journal of Speech Technology, Springer*, vol. 27, no. 2, pp. 425-436, 2024.
5. Kodali Radha, **Mohan Bansal**, "Automatic speaker and age identification of non-native children from raw speech using SincNet over ERB scale", *Speech Communication, Elsevier*, vol 159, pp. 103069, 2024.
6. Kodali Radha, **Mohan Bansal**, Dulipalla Venkata Rao "Variable STFT layered CNN model for automated dysarthria detection and severity assessment using Raw speech", *Circuits, Systems and Signal Processing, Springer*, vol 43, no. 5, pp.3261-3278, 2024.
7. Kodali Radha, **Mohan Bansal**, Rajeev Sharma "Raw waveform-based custom scalogram-CRNN: Advancements in cardiac abnormality diagnosis", *IEEE Access*, 2024.
8. Kodali Radha, **Mohan Bansal**, Ram Bilas Pachori "Speech and speaker recognition using raw waveform modeling for adult and children's speech: A comprehensive review", *Engineering Applications of Artificial Intelligence, Elsevier*, vol. 131, pp. 107661 2024.
9. Kodali Radha, **Mohan Bansal**, "Towards modeling raw speech in gender identification of children using SincNet over ERB scale", *International Journal of Speech Technology (IJST), Springer*, vol. 63, no. 3, pp. 651-663, 2023.

10. Kodali Radha, **Mohan Bansal**, “Feature fusion and ablation analysis in gender identification of preschool children from spontaneous speech”, *Circuit System and Signal Processing*, Springer, pp. 1-25, 2023.
11. Kodali Radha, **Mohan Bansal**, “Closed-set automatic speaker identification using multi-scale recurrent networks in non-native children”, *International Journal of Information Technology*, Springer, vol. 15, no.3, pp. 1375-1385, 2023.
12. B. Anil Kumar, **Mohan Bansal**, “Face mask detection on photo and real-time video images using Caffe-MobileNetV2 transfer learning”, *Applied Sciences*, MDPI, vol. 13, no. 2, pp. 935, 2023..
13. Kodali Radha, **Mohan Bansal**, “Audio augmentation for non-native children’s speech recognition through discriminative learning”, *Entropy*, MDPI, vol. 24, no. 10, pp. 1490, 2022.
14. **Mohan Bansal**, P Sircar, “A novel AFM signal model for parametric representation of speech phonemes”, *Circuit System and Signal Processing*, Springer, vol. 38, no. 9, pp.4079-4095, 2019.
15. **Mohan Bansal**, P Sircar, “Low bit rate speech coding based on multicomponent AFM signal model”, *International Journal of Speech Technology*, Springer, vol. 21, no. 4, pp. 783-795, 2018.
16. **Mohan Bansal**, D B V Singh, and P K Pandey, “Two channel perfect reconstruction multirate filter bank based on linear canonical transform”, *International Journal of Advanced Technology and Engineering Research*, vol. 2, no. 3, pp 108-112, May 2012.

## Conferences

1. **Mohan Bansal**, Vinay Kaushik, Ramesh Saha “Masked Pretraining Vision Transformers for Dysarthria Detection”, *2025 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)*, Bangalore, India (Accepted).
2. Kodali Radha, Dhulipalla Venkata Rao, Kurma Venkata Keerthana Sai, Rompicharla Thanmayee Krishna, Abdul Muneera, **Mohan Bansal**, and Gogulamudi Pradeep Reddy, “Raw-Speech DirichNet Model for Early Detection of Autism Spectrum Disorder in Children”, *2025 IEEE National Conference on Communication (NCC-2025)*, Delhi, India (Presented)
3. **Mohan Bansal**, Ramesh Saha, “Machine Learning-Based Spam Detection: A CRISP-DM Approach for Enhanced Email Security”, *IEEE India Council (Indicon)*, 2024, IIT Kharagpur, India (Presented).
4. Nivedita Tawade, **Mohan Bansal**, Ramesh Saha, “Optimized Transfer Learning with CNNs for Superior COVID-19 Detection in Chest X-Ray Imaging”, 10th, IEEE International Symposium on Smart Electronic Systems (iSES), 2024, India. <https://doi.org/10.1109/iSES63344.2024>
5. Ramesh Saha, **Mohan Bansal**, Mehak Taneja, “AtmaSuraksha: A Safety Application for Women” *International Conference on Recent Trends in Intelligent Computing and Communication- ICRTICC-2025*, Greater Noida, India (Accepted).
6. B. Anil Kumar, **Mohan Bansal**, “Pothole detection of road pavement by modified MobileNetV2 for transfer learning”, 12th International Conference on Soft Computing for Problem Solving, SocPros, IIT Roorkee, India 2023. [https://doi.org/10.1007/978-981-97-3180-0\\_34](https://doi.org/10.1007/978-981-97-3180-0_34)
7. Shaik Mulla Shabber, **Mohan Bansal**, Kodali Radha, “Machine Learning-Assisted Diagnosis of Speech Disorders: A Review of Dysarthric Speech”, *IEEE International Conference on Electrical, Electronics, Communication and Computers (ELEXCOM'23)*, IEEE, IIT Roorkee. <https://doi.org/10.1109/ELEXCOM58812.2023.10370116>

8. Shaik Mulla Shabber, **Mohan Bansal**, Kodali Radha, “A Review and Classification of Amyotrophic Lateral Sclerosis with Speech as a Biomarker ”, *14th ICCCNT 2023 (14th International Conference on Computing Communication and Networking Technologies-2023)*, *IEEE*, 2023, IIT Delhi, India.  
<https://doi.org/10.1109/ICCCNT56998.2023.10308048>
9. B. Anil Kumar, **Mohan Bansal**, “A Transfer learning approach with MobileNetV2 for parkinson’s disease detection using hand-drawings” *14th ICCCNT 2023 (14th International Conference on Computing Communication and Networking Technologies-2023)*, *IEEE*, 2023, IIT Delhi, India.
10. Kodali Radha, **Mohan Bansal**, “Automated detection and severity assessment of dysarthria using raw speech” *14th ICCCNT 2023 (14th International Conference on Computing Communication and Networking Technologies-2023)*, *IEEE*, 2023, IIT Delhi, India.  
<https://doi.org/10.1109/ICCCNT56998.2023.10307923>
11. B. Anil Kumar, **Mohan Bansal**, Rajeev Sharma, “Caffe-MobileNetV2 based tomato leaf disease detection”, *3rd International Conference on Artificial Intelligence and Signal Processing (AISP)*, *IEEE*, 2023, Amaravati, India.  
<https://doi.org/10.1109/AISP57993.2023.10134929>.
12. Brundavanam Satyasai, Rajeev Sharma, **Mohan Bansal**, “A gammatonegram based abnormality detection in PCG signals using CNN”, *3rd International Conference on Artificial Intelligence and Signal Processing (AISP)*, *IEEE*, 2023, Amaravati, India.  
<https://doi.org/10.1109/AISP57993.2023.10134986>.
13. Kodali Radha, **Mohan Bansal**, Rajeev Sharma, “Whitening transformation of i-vectors in closed-set speaker verification of children” *10th International Conference on Signal Processing and Integrated Networks (SPIN)*, *IEEE*, pp. 243-248, Mar 2023, Noida, India.  
<https://doi.org/10.1109/SPIN57001.2023.10116604>.
14. B. Anil Kumar, **Mohan Bansal** “Hardware implementation of 64-bits data by radix-8 FFT/IFFT for high speed applications” *8th International Conference on Signal Processing and Communication (ICSC)*, *IEEE*, pp. 388-393, Dec 2022, Noida, India.  
<https://doi.org/10.1109/ICSC56524.2022.10009349>.
15. **Mohan Bansal**, Sumit Mohanty, Anju Das, Prateek Jain, “Analysis and forecasting of the COVID-19 epidemic curve” *14th International Conference on Information Technology and Electrical Engineering (ICITEE)*, *IEEE*, pp. 247-252, Oct 2022, Indonesia.  
<https://doi.org/10.1109/ICITEE56407.2022.9954097>.
16. **Mohan Bansal**, P Sircar, “Phoneme classification using modulating features” *IEEE Region 10 Symposium (TENSYP)*, pp 1-5, 2022, Mumbai, India.  
<https://doi.org/10.1109/TENSYP54529.2022.9864425>.
17. Kodali Radha, **Mohan Bansal**, Shaik Mulla Shabber, “ Accent classification of native and non-native children using harmonic pitch” *2nd IEEE International Conference on Artificial Intelligence and Signal Processing (AISP)*, Feb 2022, pp 1-6, Amaravati, India.  
<https://doi.org/10.1109/AISP53593.2022.9760588>.
18. Shaik Mulla Shabber, **Mohan Bansal**, P. Mrudula Devi, Prateek Jain, “iHAS: An intelligent home automation based system for smart city” *IEEE International Symposium on Smart Electronic Systems (IEEE – iSES)*, Dec 2021, pp 48-52, Jaipur, India.  
<https://doi.org/10.1109/iSES52644.2021.00023>.
19. **Mohan Bansal**, P Sircar, “ AFM signal model for digit recognition” , *IEEE International Conference on Wireless Communications Signal Processing and Networking (WISPNET)* , March 2021, pp 354-358 Chennai, India.  
<https://doi.org/10.1109/WISPNET51692.2021.9419416>.

20. **Mohan Bansal**, P Sircar, "Phoneme based model for gender identification and adult-child classification", *IEEE International Conference on Signal Processing and Communication Systems (ICSPCS)*, Dec 2019, pp 1-7 Australia.  
<https://doi.org/10.1109/ICSPCS47537.2019.9008704>.
21. **Mohan Bansal**, P Sircar, "Parametric representation of voiced speech phoneme using multicomponent AM signal Model", *17th IEEE/ACIS International Conference on Computer and Information Science*, pp. 128-133, 2018, Singapore.  
<https://doi.org/10.1109/ICIS.2018.8466519>.

#### Books/Book Chapter

1. **Mohan Bansal**, Rajeev Sharma, Ayush Yadav, Krishna, "IoT based Intelligent Home Automation System using IFTTT with Google Assistant", *Intelligent Systems in Electrical Engineering*, Springer, Nov-2024 (Published).
2. **Mohan Bansal**, Rajeev Sharma, Ajay Dagar, "IoT based HVD Detection using AFM Signal Model", *IoT in Biomedical Sciences: Challenges and Applications*, IOP, Aug-2022 (Published).

#### PRESENTATIONS/ SEMINAR GIVEN

- Raw-Speech DirichNet Model for Early Detection of Autism Spectrum Disorder in Children (IEEE-NCC Conference, IIT Delhi) 08-March-2025
- Delivered a plenary lecture on "Automation for Sustainability in Child Speech Recognition" at International Conference on Automation for Sustainable Future (INCASF-2025), Gurukul Kangri, Haridwar, 07-March-2025
- Optimized Transfer Learning With CNNs for Superior COVID-19 Detection in Chest X-Ray Imaging, (IEEE-iSES Conference, IIIT Delhi) 16-Dec-2024
- A talk on Signal Processing and its Applications using MATLAB in Women's Institute of Technology, Uttaranchal University, Dehradun 07-March-2024
- A talk on figure and table insertion in One-Week Online National Workshop on Academic Writing using LaTeX at Dibrugath University. 02- June -2023
- A talk on figure and table insertion in three days online workshop entitled "Art of Preparing Technical Documents and Presentation using LaTeX" at VIT Chennai. 20- May -2023
- A Hands-on session on tabular environment International workshop on technical report writing using LaTeX, VITAP (Online) 31- Mar-2023
- Research paper writing using LaTeX in Short Term Course (STC) entitled "VLSI Devices and Communication Systems (VDCS)" at NIT Delhi May 2022
- Sessions on machine learning in a Value Added Course (VAC): VAC on speech signal processing using machine learning, VITAP March-May 2022
- A Hands-on session on speaker identification using ML: International Workshop on Signal Processing using Machine Learning: Applications & Hands-on (Online) 29-August-2021
- A Hands-on session on tabular and figure environment International Workshop on Technical Report Writing using LaTeX, VITAP (Online) 07- April-2021
- Multicomponent AFM signal model for speech signal processing PhD Defense, IIT Kanpur 10-Jan-2020
- Multicomponent multi-tone AFM model for speech signal Open seminar, IIT Kanpur 12-Feb-2019
- Parametric representation of voiced speech phoneme using multicomponent AM signal model, (IEEE Conference, Singapore) 06-June-2018
- Model based approach for speech signal processing, SOTA seminar, IIT Kanpur 07-Jan-2016
- AMFM signal model for speech signal, Comprehensive seminar, IIT Kanpur 08-July-2015
- Two channel paraunitary filter-bank based on LCT, (M. Tech Dissertation, NIT Kurukshetra) June-2011

	<ul style="list-style-type: none"> <li>Two channel perfect reconstruction multirate filter bank based on linear canonical transform, 4th National Conference on Wireless Communication &amp; VLSI Design (NCWCVD-2011), Gwalior Engineering College, Gwalior</li> <li>A review of two channel perfect reconstruction multirate filter bank, National Conference on Emerging Trends in Electronics &amp; Communication Engineering (ETECE-11), PIET Panipat, India</li> <li>Brain computer interface, Seminar, NIT Kurukshetra,</li> </ul>	May -2011  April -2011  Nov-2010
RESEARCH PROJECT	<p><b>External Funded Project</b></p> <ul style="list-style-type: none"> <li>Development of a Wearable Smart Cap for ASD Using EEG, Audio, and Motion Data fusion, Indian Council of Medical Research (ICMR) (Submitted- Mar 2025) <b>PI: Dr. Mohan Bansal (IIIT Sonapat)</b>, CO-PI: Dr. Ram Bilas Pachori (Prof. (HAG), IIT Indore), Dr. SRM Prasanna (Director, IIIT Dharwad), Dr. Vinay Kaushik (IIIT Sonapat).</li> <li>Low-cost Wearable Device for Early Detection of Parkinson's Disease using Pulse Signal, Department of Science and Technology- NSTMIS (Submitted: Jan 2025) <b>PI: Dr. Mohan Bansal (IIIT Sonapat)</b>, Co-PI: Dr. Om Jee Pandey (IIT BHU), Dr. Nitin Singha (NIT Delhi)</li> <li>Design of an affordable IoT Framework for Context-Aware Air Quality connected Healthcare Monitoring, Department of Science and Technology- NSTMIS (Submitted: Jan 2025) PI: Dr. Ramesh Saha (IIIT Sonapat), <b>Co-PI: Dr. Mohan Bansal (IIIT Sonapat)</b>, Suparna Biswas(MAKAU, WB)</li> </ul> <p><b>Internal Funded Project</b></p> <ul style="list-style-type: none"> <li>Social distancing alert system using deep learning. (Completed)</li> </ul>	
UG PROJECT GUIDED	<ul style="list-style-type: none"> <li>Smart Glove</li> <li>Automatic Traffic Control System (ATCS)</li> <li>Gender and age classification by Masked faces detection</li> <li>Smart home automation system</li> <li>Hair pin turn alert system</li> <li>Designing of ANNPID controller for the DC motor of electric vehicle</li> <li>Gas leakage detection system using Arduino</li> <li>Auto temperature and face mask detection</li> <li>Touchless alarm and door control using face recognition</li> <li>Voiced Control Robot Using Arduino</li> <li>Android based home automation system using NODEMCU</li> </ul>	2023 2023 2023 2022 2022 2021 2021 2021 2021 2020 2020
PHD SUPERVISION	<ul style="list-style-type: none"> <li>Kodali Radha, <i>Children's Speech Recognition and Speaker Characterization through Raw Speech-Driven Deep Learning Models</i></li> </ul>	Completed
ORGANIZED FDP/WORKSHOP	<ul style="list-style-type: none"> <li>Organized "24 hour Hackathon (Hackzill 2025)" at IIIT Sonapat</li> <li>Organized "5-Day FDP on Outcome-Based Education in Context with NEP-2020" at IIIT Sonapat,</li> <li>Organized "One-Day FDP on Emerging Trends in Nano and Spin-based Electronics Devices and their Application", VIT-AP University,</li> <li>One-week 3<sup>rd</sup> International workshop on technical report writing using LaTeX in online mode at VIT-AP University.</li> <li>A Foreign Invited Guest Lecture on "Computational Neuroscience Advancing the Understanding of Brain: Models, Methods, and Applications" from Vanderbilt University, Nashville, USA.</li> <li>Organized an Industry Expert Talk on "Solar Photovoltaic System Module Testing and Commissioning" from PVEL Lab, Hyderabad</li> <li>Organized One-Day FDP on "Real Time Machine Learning</li> </ul>	28-29 May 2025. 22-26 July, 2024. 15 Apr 2023. Apr-2023 28 Feb 2023 12 Nov 2022.

	Techniques and its Applications (Online)", VIT-AP University,	25 Jul 2022.
	• A Foreign Invited Guest Lecture on "Reinforcement Learning using General Utilities from University of Maryland, USA.	25 Apr 2022
	• One-week 2 <sup>nd</sup> workshop on technical report writing using LaTeX in online mode at VIT-AP University.	Apr-2022
	• A value added course (VAC) on "Research oriented speech processing applications using machine learning" in online mode at VIT-AP University.	Mar-May 2022
	• International workshop on signal processing using machine learning: Application & Hands-On (Online): Technically Sponsored by IEEE Guntur Subsection at VIT-AP University.	Aug-2021
	• 5-Day workshop on technical report writing using LaTeX in online mode at VIT-AP University.	April-2021
ATTENDED FDP/WORKSHOP	• One-Day Workshop on ISRO- ACADEMIA Connect for Northern Region organized by <i>NIT Kurukshetra</i>	April 2025
	• One-Week Workshop on <i>Industrial Approach to Internet of Things and Its Research Challenges</i> , organized by <i>VIT-AP University, Amaravati</i>	Feb-2023
	• Physical Workshop on <i>Signal Processing and Machine Learning for Bio-Medical Devices</i> , IIT Indore	Oct-2022
	• One-Week International Workshop on <i>Signal Processing using Machine Learning: Applications &amp; Hands-On (Online)</i> , organized by VIT-AP University, Amaravati	Sep 2022
	• 5-Day International Workshop on <i>Data Science Applications in Industry (IWDSAI)</i> , organized by VIT-AP University, Amaravati	Mar 2022
	• 3-Day Winter School on " <i>Advances in Deep Learning for Multimedia Signal Processing</i> " organized by IEEE Signal Processing Society	Mar 2022
	• 5-Day Faculty Workshop on "Research Proposal Writing & Funding Opportunities" organized by VIT-AP University, Amaravati	Mar 2022
	• A successfully completion course on <i>Nasscom Python</i> conducted by Coding Ninjas, Delhi	Dec 2021-Mar 2022
	• A webinar on <i>Icebergs of Data Science: Below the Surface of Buzzwords, Learning, and Career Paths</i> organized by VIT-AP University, Amaravati	12-Feb-2022
	• Faculty Development Program on Python organized by Ethnus	Nov 2021
	• A webinar on importance of feedback in quality assurance for HEIs organized by IQAC-Sriher	07- Aug-2021
	• Webinar on Machine Learning for Wireless Communication is organized by IEEE Information Theory Society (ITS) Bangalore Chapter	08-June-2021
	• 5-Day Hands-on Training Program on "Microstrip Microwave Components" organized by VIT-AP University, Amaravati	May-2021
	• Winter Webinar on Signal Processing (WWSP-2021) is organized by Silicon Institute of Technology, Bhubneshwar	Jan-2021
	• A one day webinar on Machine learning with MATLAB organized by SRGI Jhansi in association with DesignTech Systems Pvt. Ltd	13 July 2020
	• Sixty contact hours FDP attended and completed all the assignments on data science organized by ExcelR and APSSDC	June-2020
	• 4-days Faculty Development Program on "Mapusoft RTOS Simulator" organized by VITAP University, Amaravati	Feb 2020
	• One Day Faculty Development Program on "Python Productivity using PYNO-Z2" organized by VITAP University, Amaravati	4 Feb 2020
PROFESSIONAL SEVICES	<b>Guest Editor</b>	
	• Special Issue on Advanced Deep Learning Methods for Audio and Speech Processing, Science Publishing Group	



**Session Chair**

- NCC-25: 31st National Conference on Communications (NCC-2025), IIT Delhi, India.

**TPC Member**

- NCC-25: 31st National Conference on Communications (NCC-2025), IIT Delhi, India.
- 5th IEEE International Conference on ICT Solutions for eHealth, Bologna, Italy.
- SPIN-23: 10th International Conference on Signal Processing and Integrated Networks, Amity University, Noida, India.
- AISP-23: 3rd International Conference on Artificial Intelligence and Signal Processing, VIT-AP University, Amaravati, India.
- AISP-22: 2nd International Conference on Artificial Intelligence and Signal Processing, VIT-AP University, Amaravati, India.

**Peer Reviewer**

- IEEE Access
- Biomedical Signal Processing and Control, Elsevier
- Signal Processing, Elsevier
- Engineering Applications of Artificial Intelligence, Elsevier
- Digital Signal Processing, Elsevier
- SN Computer Science, Springer
- International Journal of Speech Technology (IJST), Springer,
- IET, Signal Processing,
- International Journal of Computing and Digital Systems
- Wireless Personal Communication, Springer
- And Many More Conferences and Journals

**SKILLS**

- Programming languages : Python, Matlab, C++, Verilog.
- Python libraries : Numpy, OS, Scikit-learn, Keras, Tensorflow, Pandas, Matplotlib, OpenCV.
- Softwares : Microsoft office, LibreOffice, Xilinx, L<sup>A</sup>T<sub>E</sub>X Weka, Praat

**ACHIEVEMENTS**

- Received best faculty award from School of Electronics Engineering (SENSE) based on the students feedback at VIT-AP. 2022-23
- Received research award for publications at VIT-AP. June 2023
- Received a certificate of excellence for successfully completing the course by Nasscom Python Mar 2022
- Selected as an Assistant Professor at National Project Implementation Unit (NPIU) under TEQIP-III. Oct 2018
- GATE qualified with GATE Score 584 Mar 2013
- GATE qualified with GATE Score 460 Mar 2011
- GATE qualified with GATE Score 467 Mar 2009
- Received MHRD Scholarship (M.Tech) 2009-2011
- Received MHRD Scholarship (PhD) 2013-2019

**SOCIAL/ACADEMIC SERVICES**

- Purchase committee member, IIIT Sonapat 2025-Present
- CPDA chairperson, IIIT Sonapat 2025-Present
- Public Information Officer (PIO), IIIT Sonapat 2024-Present
- Established four different electronics lab at IIIT Sonapat, Apr 2024
- Nodal Officer and MDO admin of iGOT Karmayogi IIIT Sonapat, 2024-Present
- Leave rule committee member, IIIT Sonapat, 2023-Present
- A core member of NAAC committee VIT-AP University, Amaravati 2021-present
- Mentorship committee member, School of Electronics Engineering, VIT-AP University, Amaravati 2021-2022
- YouTuber club coordinator, VITAP Amaravati October 2020- present
- Volunteer in international day of Yoga, IIT Kanpur May-June 2017
- Civil secretary, MSWC SBRA, IIT Kanpur Mar 2016 to Mar 2017

- Exam committee member, ITM University Gwalior Apr 2012 to July 2013
- Time-table committee member, ITM University Gwalior 2012–2013
- Organizer of art and creation (sand animation), ITM University Gwalior Nov–2012
- Hostel executive committee member of hostel-9, NIT Kurukshetra 2010–2011
- Organizer of technical quiz in Surge-2010, NIT Kurukshetra Apr–2010

PERSONAL DETAILS

Father's Name: Uttam Chand Bansal  
 Mother's Name: Meena Bansal  
 Date of Birth: 26-10-1987  
 Gender: Male  
 Marital Status: Married  
 Languages Known: English, Hindi  
 Current Address: 1102, T3A, BTW Grand Square, Sector-61 Kundli, Sonipat, Haryana  
 Permanent Address: 28, New Indra Nagar, Thatipur, Morar, Gwalior (M.P)  
 Hobbies: Reading and Writing Articles, Teaching with Practical Approach  
 Contact No.: 7754856788, 8770416694  
 Email Id: mohanbs.iitk@gmail.com, mohan.bansal@vitap.ac.in  
 Webpage: <https://sites.google.com/view/mohanbansal>

REFERENCES

<b>Prof. Ram Bilas Pachori</b>	<b>Prof. Varun Bajaj</b>
Professor,	Associate Professor,
Department of Electrical Engineering,	Electronics and Communication Engineering,
IIT Indore, India	MANIT Bhopal, India
pachori@iiti.ac.in	varun.bajaj@manit.ac.in

DECLARATION I do hereby confirm that the given information is true and correct to the best of my knowledge.



Date: July 2, 2025

Mohan Bansal

Place: Sonipat, Haryana