



# **Dr.K.V. SUBBA REDDY INSTITUTE OF TECHNOLOGY**

Dupadu Village, NH-44, Lakshmipuram (Post), Kurnool, AP-518218.

(Approved by AICTE, New Delhi & Affiliated to JNTUA, Anantapuramu, ISO 9001:2008 Certified Institution)

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## **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**ACCREDITED BY NBA**

### **FACULTY PROFILE**

**Faculty Name:** Dr. Suman Turpati

**Faculty Photo:**



**Faculty Description:**

Dr. Suman Turpati, is the Incharge of Research and Development and Associate Professor in the Department of ECE in Dr. K.V. Subba Reddy Institute of Technology (Autonomous) in Kurnool. With a strong educational foundation, he did his Bachelor's Degree in ECE from MIST 2011, which is affiliated with JNTU Hyderabad. He further refined his expertise by completing a Master of Engineering in ECE with specialization of wireless Mobile Communication from JNTU Hyderabad in 2014. His academic journey culminated in a Ph.D. in ECE from JNTUA Anantapuramu. Bringing over 15 years of rich experience in academia, research, and administration, he has excelled in various roles, including Associate Professor, Controller of Examinations and Incharge of Research and Development. An accomplished author, he has published 22 publications in prestigious international journals, including Elsevier, Springer, IEEE Transactions, and Scopus-indexed platforms, and 9 papers are presented in IEEE Conferences, and holds 2 patents. His contributions to the field significantly enhance the academic landscape. He has attended more than 40 Faculty Development Programs / workshops. He has supervised over 35 projects at both the postgraduate and undergraduate levels, and served as an examiner for M.Tech students at JNTUA, and other reputable institutions. His collaborations as a guest faculty member, counselor, trainer, and examiner further showcase his dedication to academic excellence. He has been an enthusiastic expert speaker in numerous Faculty Development Programs, organizing a variety of workshops and short-term courses, while also participating in many such programs himself. Additionally, he has taken on the responsibility of setting question papers for several respected government universities and autonomous institutions. His research interests are exciting and encompass areas like Adaptive Signal Processing, Communications, Machine Learning, Image Processing, Artificial Intelligence, and Quantum Computing.



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#### Profile Tab:

#### Qualification

Qualification	Board/University	College/School	Specialization	Year of Passing	Percentage
Ph.D.	JNTU, Anantapuramu	JNTU, Anantapuramu	Adaptive Signal Processing	June 2023	
M. TECH	JNTU, Hyderabad	JPNCE, Mahbubnagar	Wireless Mobile Communication	2014	82.04
B.TECH	JNTU, Hyderabad	MIST, Hyderabad	ECE	2011	72.04
INTERMEDIATE	Board of Intermediate Education	APSWR junior college Chinnatekur (vi) Kurnool (D)		2006	90.07
S.S.C	Secondary School of Education	Z.P.P.High School Nehru Nagar(v), Kurnool (D)		2004	89.85

#### Awards / Achievement

- ✓ A JNTUA (2015) RATIFIED faculty.
- ✓ Acting as Reviewer for Springer Nature, IEEE and SAGE Journals

#### Responsibilities Tab:

#### Responsibilities

- Controller of Examinations (Incharge)
  - Additional Controller of Examinations (ACE1)
  - NBA Criterion in charge
  - Research Domain Head
- ✓ Working as a faculty
- The following responsibilities are carried out as a faculty
- Teaching regular Course Work
  - Mentoring the Students
  - Continues research



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Teaching Tab:

Expertise / List of subjects handled

<u>GRADUATION LEVEL (B.TECH)</u>	<u>PG LEVEL (M.TECH)</u>
<ul style="list-style-type: none"><li>➤ Control Systems</li><li>➤ Signals and Systems</li><li>➤ Digital Signal Processing</li><li>➤ Digital Image Processing</li><li>➤ Electronic Devices and Circuits</li><li>➤ Analog Electronic Circuits</li><li>➤ Electronic Measurements &amp; Instrumentation</li><li>➤ Switching Theory &amp; Logic Design</li><li>➤ Digital communications</li><li>➤ Real Time Operating Systems (RTOS)</li></ul>	<ul style="list-style-type: none"><li>➤ Advanced Digital Signal Processing</li><li>➤ Digital Image and Video Processing</li></ul>

Research Tab:

Research Interest

- Adaptive Signal Processing
- Communications
- Machine Learning
- Image Processing

Publications Tab:

**Research Contributions: Total 22 publications & 9 Conferences**

- **Paper Publications on Research Topic:** 6-SCIE indexed, 2-ESCI indexes 11-SCOPUS indexed journals , 3-Good UGC Journals & 9-Conferences.
- **Book Chapters:** 02 (Scopus)
- **Four SCI Papers are Under review.**
- **Two ESCI & Scopus papers are under review.**
- **Three papers are accepted in IEEE Conference in ICSIT 2025 Symbiosis Institute of Technology, Nagpur.**
- **Reviewer for the following journals and conferences:**
  1. Journal of Vibration and Control- Elsevier



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2. IEEE Access
3. Signal, Image and Video Processing-Springer
4. Journal of Sound and Control-SAGE
5. IEEE Conferences

Orcid Id: [0000-0002-0842-1315](https://orcid.org/0000-0002-0842-1315)

Scopus Id: 57210234883

Researcher Id: [rid117678](https://www.researcherid.com/rid/117678)

Google Scholar Id: [-G6xXRm0AAAAJ&hl](https://scholar.google.com/citations?user=G6xXRm0AAAAJ&hl)

### Citations

(Scopus):1982

H-Index: 07

Citations (Google):113

H-Index:07

i-10 index:04

### PUBLICATIONS:

S.No	SCI / SCIE / ESCI / WEB OF SCIENCE / SCOPUS JOURNALS	Indexing	Quality Factor
1	<b>Turpati Suman</b> , Roy A, Addepalli T, Alkahtani M, Hakami A, Minai AF, Hammad A. Vector Decimation Harmonic Mean Based Algorithm For online Acoustic Feedback Active Noise Control. <b>IEEE Access</b> . (2025) May 26 .	SCIE	Q1
2	<b>Turpati, Suman</b> , Ajay Roy, K. C. T. Swamy, Mohammad Khalid Imam Rahmani, Masood Ur Rehman, Sudan Jha, Sultan Ahmad, Jabeen Nazeer, Hikmat AM Abdeljaber, and Yasser Eid Aljohani. "Robust Non-Linear Active Function-Based FxRLS for Impulsive Active Noise Control." <b>IEEE Access</b> 12 (2024): 43222-43234.	SCIE	Q1
3	Swamy, K. C. T., Ratnam, D. V., <b>Suman, T.</b> , & Ahmed, S. T. (2023). Time-differenced double difference method for measurement of Navigation with Indian Constellation (NavIC) receiver differential phase bias. <b>Measurement (Elsevier)</b> , 207, 112385.	SCIE	Q1
4	<b>Suman, T.</b> , & Moram, V. (2023). Implementation of robust virtual sensing algorithm in active noise control to improve silence zone. <b>International Journal of Speech Technology (Springer)</b> , 26(1), 51-62.	SCI	Q1
5	<b>Suman, T.</b> , & Venkatanarayana, M. (2021). Active noise control for PVC duct using robust feedback neutralization F× LMS approach. <b>Journal of Control, Automation and Electrical Systems (Springer)</b> , 32(5), 1189-1203.	SCI	Q2
6	<b>Suman, T.</b> , & Venkatanarayana, M. (2020). Improved performance of impulse active noise control using active	SCIE	Q1



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- function threshold with absolute harmonic variable step-size algorithm. **Microprocessors and Microsystems (Elsevier)**, 77, 103158.
- 7 KCT, S., **Turpati, Suman.**, Siddiqu, M. A., Jaafar, A. A., Shaik, T. A., & Jha, S. (2025). An Efficient Simulation Framework for 2D LiDAR-Based Navigation and Collision Detection of Autonomous Ground Vehicles to Enhance Safety in Warehouses. **Internet Technology Letters (Willey)**, 8(5), e70114. **ESCI & Scopus** Q3
- 8 **Suman Turpati**, B. Geetha Rani, A. V. Prabu, Amrit Mukherjee, Sudan Jha, K. C. T. Swamy.,(2025). Review of 6G Wireless Communication System With Artificial Intelligence, **Internet Technology Letters (Willey)**. **ESCI & Scopus** Q3
- 9 Swamy, K. C., Devanaboyina, V. R., Nallagarla, R., Shaik, T. A., & **Turpati, Suman.** (2024). Correlation between rate of TEC index and positioning error during solar flares and geomagnetic storms using navigation with Indian constellation receiver measurements. *Journal of Applied Geodesy*, (0) (2024). **Scopus** Q2
- 10 **Suman Turpati**, S. Manoj Kumar, Madam Yaswanth, T. Ratnakara Reddy "Enhanced Active Function model based Algorithm for Environmental Noise Cancellation." **African Journal Of Sciences**, Vol 6, Issue 10 2024. **Scopus** Q3
- 11 Suman Turpti T. Ganesh, V. Lakshmikanth, S. Samiuddin Khadri, "Convergence Analysis of Environmental Echo Noise Cancellation Using Multi-subband Filter Algorithm." **African Journal of Sciences**, Vol 6, Issue 10 2024. **Scopus** Q3
- 12 Suman, T., Kaliappan, S., Natrayan, L., & Dobhal, D. C. (2023, March). IoT based Social Device Network with Cloud Computing Architecture. In 2023 Second International Conference on Electronics and Renewable Systems (ICEARS) (pp. 502-505). **IEEE**. **Scopus**
- 13 Turpati, S., Richi, S. R. P., Mohammed, T. S., Naveen, K. S., & Ranga, R. S. (2023). Smart Notice Board Using the Internet of Things–Based NODEMCU ESP8266. In AI-Aided IoT Technologies and Applications for Smart Business and Production (pp. 211-224). CRC Press. **Scopus** Q4
- 14 Suman, T., Maheswari, K. U., Swamy, K., & Moram, V. (2022). Complex Frequency Block Domain Analysis and Efficient Implementation for Computational Active Noise Control. **Mathematical Statistician and Engineering Applications**, 71(4), 1808-1824. **Scopus** Q4
- 15 **Suman, T.**, & Venkatanarayana, M, (2020)"An Efficient Simulink Model for Active Noise Control using Filtered-x Adaptive Algorithms", published on **Journal of Advanced Research in Dynamical & Control Systems**, a SCOPUS



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Index Journal, Vol. 12, Issue-03, June 2020,

- |    |   |               |           |
|----|---|---------------|-----------|
| 16 | <b>Suman, T., &amp; Venkatanarayana, M, (2019) "Improved Convergence Rate with Modified Variant LMS Algorithms "</b> published on <b>Journal of Advanced Research in Dynamical &amp; Control Systems</b> , a SCOPUS Index Journal, Vol. 11, Issue-07, June 2019, ISSN: 1943-023X. | <b>Scopus</b> | <b>Q4</b> |
| 17 | <b>Suman, T., &amp; Venkatanarayana, M, "Comparison Study of Active Noise Cancellation" published on Journal of Emerging Technologies and Innovative Research (JETIR), a UGC Journal (Journal No. 63975), Vol. 6, Issue-02, Feb 2019, ISSN-2349-5162 .</b>                        | <b>UGC</b>    |           |
| 18 | <b>T.Suman, "A Piecewise Linear Companding Transform For Papr Suppression Of Ofdm Signals With Companding Distortion Mitigation" International Journal of Computer Systems (ISSN: 2394-1065), Volume 03– Issue 07, July, 2016.</b>  | <b>UGC</b>    |           |
| 19 | <b>T.Suman, "PAPR Reduction In OFDM System Using Non Linear Companding Algorithm" International Journal of Research In Advanced Engineering Technologies, Id Vol 02- Issue 02, October 2014.</b>  | <b>UGC</b>    |           |

### CONFERENCES :

S.No	International and National Conferences	Indexing
1	Paper Presented on "Multistage Neural Network and Image Processing Based Plant Leaf Disease Diagnosis". <b>In 2025 International Conference on Sustainability, Innovation and Technology (ICSIT-2025) IEEE conference</b> held on August 22-23 at Symbiosis Institute of Technology, Nagpur.	Scopus
2	Paper Presented on "SAR Image Colorization for Comprehensive Insight using Deep Learning Model (h) ". <b>In 2025 International Conference on Sustainability, Innovation and Technology (ICSIT-2025) IEEE conference</b> held on August 22-23 at Symbiosis Institute of Technology, Nagpur.	Scopus
3	Paper Presented on "A Secure Image Encryption Using Shannon's Principles (Confusion And Diffusion) ". <b>In 2025 International Conference on Sustainability, Innovation and Technology (ICSIT-2025) IEEE conference</b> held on August 22-23 at Symbiosis Institute of Technology, Nagpur.	Scopus





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- Paper Presented on “Features Fusion For Natural Tone - Mapped image quality Evaluation using DI-Cnn”. **In 2025 International Conference on Emerging Trends in Engineering Technology and Management (ICETM-2k25)** held on April 11-12 2025 at Viswam Engineering College, Madanapalle. **Scopus**
- Paper Presented on “IoT based Social Device Network with Cloud Computing Architecture”. **In 2023 Second International Conference on Electronics and Renewable Systems (ICEARS) IEEE Conference.** **Scopus**
- Paper Presented on “An Efficient Simulink Model for Active Noise Control using Filtered-x Adaptive Algorithms” in **ICASET-2020** to be held at K.S.R.M. College of Engineering, on January 5-6 2020. **Scopus**
- Paper presented on “Active Noise Control using Active Function Threshold-based FxRLS Algorithm” in **ICSPCOMSD-2019** to be held at Malla Reddy College of Engineering for Women, Hyderabad, on 6<sup>th</sup>-7<sup>th</sup> December 2019. **Scopus**
- Paper Presented on "Improved Convergence Rate with Modified Variant LMS Algorithms” in **International Conference On Power, Computer, Communications And Artificial Intelligence (ICPCCAI 2019)**, held at JECRC University, Jaipur, on 19-21, April 2019. **Scopus**
- Paper Presented on “Comparison Study of Active Noise Cancellation” in **International Conference on Advances in Signal Processing, Power, Embedded, Soft Computing, Communication, and Control Systems, (ICSPECS-2019)** held at GPRCE, Kurnool, on 11-12 Jan 11-12, 2019. **UGC**

#### ***Patents:***

- Title: Intelligent wearable sensor for covid-19 patient monitoring (Indian Patent)**  
Patent No.: 202241010355A  
Publication Date: 29/04/2022  
Journal No.: 17/2022



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#### **2. Title: Surveillance Drone for Security Applications**

Patent No.: 202241026079

Publication Date: 22/05/2022

#### **CERTIFICATIONS:**

- ✓ NPTEL ONLINE CERTIFICATION for successfully completing the course **“INTRODUCTION TO INTERNET OF THINGS”**.
- ✓ NPTEL ONLINE CERTIFICATION for successfully completing the course **“THE JOY OF COMPUTING USING PYTHON”**.
- ✓ NPTEL ONLINE CERTIFICATION for successfully completing the course **“PRINCIPLES OF SIGNALS AND SYSTEMS”**.
- ✓ NPTEL ONLINE CERTIFICATION for successfully completing the course **“DIGITAL IMAGE PROCESSING”**.
- ✓ Course Complete Certificate in MATHWORKS on **MATLAB Onramp**.

#### **Personal Profile:**

Father's Name : T SUNKANNA

Date of Birth : 09-06-1989.

Present Address : Associate Professor. Dept of ECE, KVSrit, Kurnool.

Permanent Address : #78-8-A-12-2-61-A, New Krishna Nagra, Kurnool Dt, Andhra Pradesh-518002

E-mail : [sumanturpati@gmail.com](mailto:sumanturpati@gmail.com) / turpatisuman87@gmail.com

Mobile Number : +91-9703204904.

#### **Declaration:**

I hereby declare that the above mentioned details are true to the best of my knowledge.

**Dr Suman Turpati**

**Associate Professor in ECE  
Dr KVSrit, KRNOOL-518218.**