# Resume

Name: Dr. Venkumahanti Ashok Kumar

**Employee ID:** A5ECE00T13

**Designation:** Professor

**Department:** E.C.E

**Date of Birth:** 15.03.1969

Father Name: V.Prasada Rao

Mother Name: V. Sarojini Devi

**Reservation Category :** BC-D

Address: Plot No. 104, Govind Nagar, BehindIndira Nagar, Srikakulam.

**Mobile Number:** 9441306123

Email id: venkuash123@gmail.com

**Date of Joining in the Institution:** 27-07-2006

**Academic Excellence:** 

QUALIFICATION	BOARD / UNIVERSITY	DIVISION	YEAR
Ph.D(ECE)	GITAM University, Visakhapatnam	Awarded	March,2019
M. Tech (ECE)	JNTUK, Kakinada	FIRST class with distinction	2010
B. E( ECE)	University of Madras, Madras	SECOND class	1990

# **Total Years of Experience (Teaching/Industry):** 32Years

S.No.	Pe	riod	Organization/Institution	Position Held
S.NO.	From To	Organization/Institution	Position neid	
1	1st July, 2024	Till date	AITAM, Tekkali	Professor & HoD
2	1st April 2019	30 <sup>th</sup> June, 2024	AITAM, Tekkali	Professor
3	1st July 2011	31st March, 2019	AITAM, Tekkali	Associate Professor
4	1st July 2008	30 <sup>th</sup> June, 2011	AITAM, Tekkali	Sr. Assistant Professor
5	27th July 2006	30 <sup>th</sup> June, 2008	AITAM, Tekkali	Assistant Professor



6	16th Nov 1998	26 <sup>th</sup> July, 2006	Sri GCSR college, Rajam	Sr.Lecturer& HOD
7	15th Nov 1997	15 <sup>th</sup> Nov, 1998	PRAKUNEquipments Pvt. Ltd.	Resident Engineer
8	8th Sep 1993	31 <sup>st</sup> Oct, 1997	Pacific Telecommunications & Instruments Ltd., Hyd.	Resident Installation cum Service Engineer, VSP
9	1st March 1992	14 <sup>th</sup> July, 1993	XEDD Telecom Pvt. Ltd., Hyd	Resident Engineer, VSP

### **Areas of Interest:**

- 1. Digital Image Processing (Watermarking).
- 2. Microprocessors & Micro controllers.
- 3. Electronic Devices and Circuits.
- 4. Electronic Circuit Analysis.

# **Guidance of Academic Projects:**

- 1. UG Level (B.Tech.): 29
- 2. PG Level (M.Tech.): 09

# **Memberships of Professional Societies and Other Organizations:**

- 1. The Institution of Electronics & Telecommunication Engineers (IETE), Associate Member –Mem.No: AM-210698.
- 2. Institute of Electrical and Electronics Engineers(IEEE), IEEEMember#99667462

# **Leadership & Administrative Roles**

- Held the role of BoS Chairman, overseeing curriculum development, policy implementation, and industry-academia collaboration to enhance education quality and accreditation alignment.
- Served as GRC Convener, overseeing grievance redressal processes and ensuring effective resolutions.
- Acted as SPOC for APSSDC, coordinating initiatives and programs with the Andhra Pradesh State Skill Development Corporation.
- Functioned as QEEE Coordinator, facilitating participation in the Quality Enhancement in Engineering Education program.
- Led as MOOCs Coordinator, managing and promoting online courses for skill development and certification.
- Held dual roles as Anti-Ragging Committee Coordinator and Anti-Ragging Squad
   Convener, ensuring a safe and ragging-free environment on campus.

- Contributed to academic governance as a BOS Member (Board of Studies), influencing curriculum design and academic policy decisions.
- Received a Certificate of Appreciation from NPTEL-SWAYAM, IIT Madras, for mentoring students in the "Introduction to Machine Learning" course (Jul-Dec 2024).
- Received a Certificate of Appreciation from NPTEL—SWAYAM, IIT Madras, for mentoring students in the "Machine Learning and Deep Learning-Fundamentals and Applications" course (Jul–Dec 2024).

# **Details of Publications:**

#### **Book Publications:**

- 1.AWS FOR CLOUD COMPUTING, ISBN: 978-93-95250-61-0, SHREE PUBLISHING HOUSE, Year 2025, Pages 1-148.
- 2.MICROPROCESSORS and SYSTEMS, ISBN: 978-93-91117-22-1, SHREE PUBLISHING HOUSE, Year 2022, Pages 1-306.

#### **Patents:**

- 1. "Patent Objects Selecting Recommender System Using AI- Based and Deep Learning Programming" Published with publication date 22/01/2021, application No. 202141000835 A.
- **2.** "Wearable ECG Monitoring Device with Bluetooth Connectivity" (Design Number: 6408633) UK Design Patent (Granted)
- **3.** "Predictive maintenance of IoT operated drone using Machine learning in manufacturing" Published with publication date 31/10/2025, Application No. 202541095706A.

#### **International Journals:**

- 1. A.S.Srinivasa Rao, P.Mallikarjuna Rao, E.Jaya and **V.Ashok Kumar,** "An alternative approach to design & analysis of Broadband Beamspaceadoptive arrays", IJEST, Vol.3No.9,pp. 7029-7036,2011.
- 2. A.S.Srinivasa Rao, P.Mallikarjuna Rao, M.Muralidhar and V.Ashok Kumar "Design and Analysis of Broadband Beamspace adoptive arrayas using Fractional fourier Transform", IJECE, Vol.5, No.2, pp.193-206, 2012.
- 3. N.DhanunjayaRao, V.Ashok Kumar, "FPGA "Implementation of high performance carry select adder", IJARECE, Vol.1, No. 6, pp. 58-64, 2012

- 4. **V.Ashok Kumar**, J.Sateesh, P.Sirish Kumar, "Effective Digital Watermarking Approach Using Combined DWT –DCT", IJERT, Vol.2, No.11, pp.1269-74,2013.
- 5. Thirupathi Naidu P, **Ashok Kumar V**, KranthiR, "High-speed RC4 algorithm based on True dual Port RAM by using verilog HDL", (IJITEE) Vol. 4, No.7,pp.97-99, 2014.
- 6. D.Himabindu, V Ashok Kumar, Ch. Srinivasa Rao, C.Dharma Raj, "Performance evaluation of edge directional image interpolation scheme', IJCTA, Vol. 6, No. 7, pp. 606-11, 2015.
- 7. **Venkumahanti Ashok Kumar**, Dharma Raj Cheruku and Srinivasa Rao Chanamallu"Digital Watermarking Approach Based on Edgebased Sorted Pixel Value Difference(ESPVD)", IJST, Vol. 9, No. (S1), pp. 1-11, 2016.
- 8. I.Ramchand, V. Ashok Kumar, Ch. Srinivasa Rao, C. Dharma Raj, "Digital Image Watermarking Approach based on QR and DWT Method", IJARECE, Vol. 6, No. 7, pp. 837-42, 2017.
- 9. **V.Ashok Kumar**, C.Dharma Raj, Ch. Srinivasa Rao, "A Hybrid Digital Watermarking Approach Using Wavelets and LSB", IJECE, Vol.7, No.5, pp.2483-94, 2017.
- 10. **V. Ashok Kumar**, Ch. Srinivasa Rao, C. Dharma Raj"IMAGE DIGITAL WATERMARKING: A SURVEY", IJAMTES, Vol.8, No.1,pp.127-143, 2018.
- 11. E.Pavani, V.Ashok Kumar, A.JayaLkshmi, "Performance Evaluation of Gate Diffusion Input and Modified Gate Diffusion Input Techniques for Multipliers and Fast Adders design", IRJET, Vol.06, July, pp. 1518-27, 2019.
- 12. **V.Ashok Kumar**et al., "Breast Cancer Detection using CAD,IRJMETS", Vol.04, No.06, pp.4464-67, 2022.
- 13. **V.Ashok Kumar**et al., "Diabetes Detection Based on Iris Abnormal", IRJMETS, Vol.04, No.06, pp. 5000-04, 2022.
- 14. **V.Ashok Kumar**et al., "Defects Detection in Integrated Circuits with Design for Test by using scan insertion approach", Semiconductor Optoelectronics, Vol. 42, No. 01, pp. 636-44, 2023.
- V.Ashok Kumaret al., "Chaos Based Encryption and Data Hiding Scheme Based on Pixel- value Differencing In Dual Images", IRJMETS, Vol.05, No.04, pp. 1792-97, 2023.
- 16. **V.Ashok Kumar**et al., "Ocular Disease Identification Using deepLearning Techniques", IRJMETS, Vol. 05, No. 04, pp. 742-51, 2023.

- 17. **V.Ashok Kumar** et al., "Efficient Multi Class Classification of Ayurvedic Cosmetic Leaves Using Convolution Neural Networks", IRJET, Vol. 11, No.4, pp. 942-946, April 2024.
- 18. **V.Ashok Kumar** et al., "IOT Solutions for Efficient Parking Management", IRJET, Vol. 11, No.4, pp. 308-313, April 2024..
- 19. **V.Ashok Kumar** et al., "Enhancing Salary Predictions with Ensemble Learning Techniques", iJRASET, Vol. 13, No. 4, April 2025.
- 20. **V.Ashok Kumar** et al., "An optimized Machine Learning Model for Botnet Detection in IoT Networks", JETIR, Vol. 12, No. 4, April 2025.

# **International/National Conferences:**

S.No	Date	Name of the Program	Name of the Paper	<b>Host Institute</b>
1	14 <sup>th</sup> -15 <sup>th</sup> , Dec, 2014.	National Conference on Advances in Communication Technologies(NCACT- 2014)	PerformanceEvaluation of Digital Watermarking Using DCT-DWT and modified Bilinear Interpolation Technique	GITAM University, Visakhapatnam
2	20 <sup>th</sup> -21 <sup>st</sup> , Feb,2015.	Emerging trends in Signal Processing and Communication Engineering(ESPACE- 2015)	Performance evaluation of edge directional image interpolation scheme	AITAM, Tekkali
3	7 <sup>th</sup> -8 <sup>th</sup> December, 2024	International Conference on "Intelligent Signal Processing and Effective Communication Technologies (INSPECT)	Optimizing GPS Positioning: A Deep Learning Approach to Improve Accuracy	ABV-IIITM Gwalior, India
4.	27 <sup>th</sup> -28 <sup>th</sup> February, 2025	5 <sup>th</sup> National Level Virtual Conference on "Recent Advances in Technology & Engineering" (CRATE- 2025)	Evaluating Machine Learning and Deep Learning Approaches for Grid Stability Prediction: A Comparative Study of SVM and GCN+MLP	VEMU Institute of Technology, Chittoor, Tirupathi
5.	5 <sup>th</sup> – 6 <sup>th</sup> April, 2025	6 <sup>th</sup> International Conference on Devices for Integrated Circuits	Hybrid and Ensemble Machine Learning Models for Effective Imbalanced Data Classification	Kalyani Government Engineering College, west Bengal, India

# Details of Conferences / Workshops / Refresher Courses Organized:

- 1. Organized a Faculty Development Program on "Awareness on Outcome Based Education (OBE)" on 30-08-2025, in association with Department of ECE, AITAM.
- 2. Served as Convener for the event "Coding Olympus for Young Innovators" organized by the Department of ECE, Aditya Institute of Technology and Management, on 18 September 2025, aimed at promoting programming skills among second-year students.
- 3. Served as a Faculty Coordinator for the One-Day Student Training Program on "Integrating Sensors with Wireless Networks: Techniques & Trends" organized by the Department of ECE, AITAM, on 24th September 2025.
- 4. Co-Convenor, AITAM's Go-Karting Championship Season-2 (March 4<sup>th</sup>-7<sup>th</sup>, 2025), hosted by Aditya Institute of Technology and Management, Tekkali, AP, overseeing event logistics and coordination for a successful competition.
- 5. Acted as Convenor for the One-Day Workshop on "VLSI Design-I" organized by the Department of ECE, AITAM, on 18th October 2025, focusing on core VLSI concepts and Verilog design skills.
- 6. Organized a Faculty Development Program on "Deep Learning for Engineering Applications" from 2nd to 6th September, 2024, in association with NITTR, Chandigarh&AITAM.
- 7. Acted as a resource person for a session on "Emerging Technologies with a Focus on VLSI DFT" from 3rd to 5th October, 2024, at AITAM, contributing to the knowledge enhancement of participants in advanced VLSI Design for Test (DFT) techniques.
- 8. Tear Down and Rebuild: The Ultimate Circuit Challenge held on 03.10.2024 and Acted as a judge, overseeing event registration, team coordination, and evaluating participants' technical skills in circuit drawing, memory, and reconstruction across multiple rounds, ensuring accuracy and fairness in scoring.
- 9. Two-Week ISTE Workshop on "Pedagogy for Effective use of ICT in Engineering Education-14" conducted by IIT Bombay.
- 10. "ASPIRE 2K-14"
- 11. "ASIP 2K" 13
- 12. "ASPIRE 2K"-12
- 13. "ADVITYA" 2K-11

# **Details of Conferences / Workshops / Refresher Courses Attended:**

#### 1. Internal:

S. No.	Dates	Name of The Programme	<b>Host Institution</b>
1	6 <sup>th</sup> -7 <sup>th</sup> Sept 2008	Advances in Electrical Engineering	AITAM, Tekkali
2	12th-13thSept	Recent Developments in Information and	AITAM, Tekkali

	2008	Communication Technologies	
3	22 <sup>nd</sup> Sept2008	Workshop on Recent Trends of Nano Technology	AITAM, Tekkali
4	29 <sup>th</sup> March2011	Workshop on Advances in MATLAB and its Tools	AITAM, Tekkali
5	16 <sup>th</sup> -29 <sup>th</sup> April 2012	Soft Computing Application to Power system & Control MATLAB	AITAM, Tekkali
6	28 <sup>th</sup> -29 <sup>th</sup> April 2012	A Two day National workshop on "Soft- Computing Applications toCommunication And Management"(SACAM-12)	AITAM, Tekkali
7	19 <sup>th</sup> January, 2013.	A One day workshop on Outcome Based Education	AITAM, Tekkali
8	12 <sup>th</sup> June – 2 <sup>nd</sup> August 2014	A Two-Week ISTE Workshop on "Pedagogy for Effective use of ICT in Engineering Education-14" conducted by IIT Bombay.	AITAM, Tekkali
9	15 <sup>th</sup> -16 <sup>th</sup> Nov 2014	Twenty First Century the dawn of Digital Era:Pedagogical Issues of Technical Teachers	AITAM, Tekkali
10	6 <sup>th</sup> Dec,2014	A One day workshop on Outcome Based Education	AITAM, Tekkali
11	23-25 <sup>th</sup> June 2016	Pedagogy and Mnagement Capacity Enhancement Program for Teaching Staff	AITAM, Tekkali
12	26 <sup>th</sup> Sep-1 <sup>st</sup> Oct 2016	Advances in Communication Technology	AITAM, Tekkali
13	13 <sup>th</sup> -14 <sup>th</sup> July 2019	Outcome Based Education	AITAM, Tekkali
14	22 <sup>nd</sup> – 26 <sup>th</sup> June 2020	Technological Advances in Wireless Communication Systems	AITAM, Tekkali
15	7 <sup>th</sup> -12 <sup>th</sup> September, 2020	Antenna Design and Analysis Using Mathematical Solvers	AITAM, Tekkali
16	29 <sup>th</sup> October- 3 <sup>rd</sup> November, 2020	Antenna Design and Analysis Using Mathematical Solvers	AITAM, Tekkali

# 2.External:

S. No.	Dates	Name of The Program	Host Institution
1	18 <sup>th</sup> - 19 <sup>th</sup> February 2006	Best Practices in higher education – A special emphasis on rural institution	Govt. Degree College(Men), Srikakulam
2	8 <sup>th</sup> -9 <sup>th</sup> Sept 2006	Recent trends in Nano Electronics	GMRIT, Rajam
3	14 <sup>th</sup> - 15 <sup>th</sup> February 2007	A Two Day National Workshop on DSP Tools	Aditya Engineering College, Surampalem, E.G. Dist
4	18 <sup>th</sup> - 19 <sup>th</sup> February	Applications of Microprocessors & Micro Controllers	GMRIT, Rajam

	2008		
5	24 <sup>th</sup> November 2009	Research Methodologies	University College of Engineering, Kakinada
6	18 <sup>th</sup> - 19 <sup>th</sup> November 2011	Advanced Communication Systems and Networks	GMRIT, Rajam
7	28 <sup>th</sup> -29 <sup>th</sup> June 2013	Communication Signal and Image Processing(COSIP-13)	JNTUK University College of Engg. VZM.
8	17 <sup>th</sup> - 18 <sup>th</sup> Dec2013	Quality Enhancement in Engineering Education(QEEE)	IIT Madras
9	28 <sup>th</sup> February- 1 <sup>st</sup> March 2014	VLSI Applications to Radar and Image Processing(VARIP-14)	GMRIT, Rajam
10	11 <sup>th</sup> -12 <sup>th</sup> Dec 2014	Research and Teaching Methodologies in Electrical Engineering.	IIT, Hyderabad
11	4 <sup>th</sup> January 2016	Quality research writing and research impact measures	GITAM University, Visakhapatnam
12	8 <sup>th</sup> July 2017	Empowering teaching excellence through E-learning platforms	JNTU Kakinada
13	July- Oct 2018	Faculty Development Program – Digital Image Processing	NPTEL- AICTE, MHRD, Govt.of India.
14	25 <sup>th</sup> Feb - 2 <sup>nd</sup> March 2019	Practical RF Antenna Design with Simulation	Electronics & ICT Academy NIT Warangal(T.S), India and AITAM Autonomous Tekkali, Srikakulam Dist.AP
15	Aug- Oct 2019	Faculty Development Programme – Accreditation and Outcome Based Learning	NPTEL- AICTE, MHRD, Govt.of India.
16	18 <sup>th</sup> – 30 <sup>th</sup> May 2020	Faculty Development Programme – Internet of Things (IOT).	APSSDC
17	18 <sup>th</sup> -24 <sup>th</sup> April 2020	Practical aspects of finite analysis using ABAQUS	APSSDC
18	30 <sup>th</sup> April -04 <sup>th</sup> May 2020	Design, simulation and development of unmanned aerial vehicles (Drones) and applications in various engineering sectors	NAFEMS and RIT Islampur and RCE Eluru
19	30 <sup>th</sup> April - 2 <sup>nd</sup> May 2020	Automotive structures design using the CATIA	APSSDC
20	11 <sup>th</sup> -15 <sup>th</sup> May 2020	Art of Effective Teaching	Excel college for commerce and science, Komarapalayan
21	18 <sup>th</sup> - 22 <sup>nd</sup> May2020	Nano Materials for Energy Harvesting and Bio medical Applications	Godavari Institute of Engineering and Technology, Rajamahendravaram
22	8 <sup>th</sup> -13 <sup>th</sup> June 2020	Arduino based low cost data acquisition system using Scilab	Pragathi engineering college, EG district
23	15 <sup>th</sup> -20 <sup>th</sup> June	Blockchain security and smart contracts	Vellagapudi Ramakrishna

	2020		Siddhartha Engineering college, Vijayawada
24	15 <sup>th</sup> -27 <sup>nd</sup> June 2020	Embedded Systems	APSSDC
25	3 <sup>rd</sup> -7 <sup>th</sup> August, 2020	Workshop on Python Programming	360DigiTMG, India
26	03rd to 4th September, 2020	Communication, VLSI, Image Processing and Design of Antennas	UCEV, JNTUK, Vizianagaram
27	1 <sup>st</sup> -6 <sup>th</sup> July, 2021	Physical Layer Techniques for 5G Technology	NEC, GUDUR
28	16 <sup>th</sup> Aug- 04 <sup>th</sup> Spet 2021	Python Programming	APSSDC
29	22 <sup>nd</sup> -27 <sup>th</sup> Aug 2022	IoT based Smart Automation System	MVGR College of Engineering(A), Vizianagaram
30	22 <sup>nd</sup> -27 <sup>th</sup> Aug 2022	Amazon Web Services (AWS)	GITAM University, Visakhapatnam.
31	13 <sup>th</sup> -17 <sup>th</sup> Feb 2023	Outcome Based Curriculum Design	NITTR, Chandigarh
32	20 <sup>th</sup> -24 <sup>th</sup> Feb 2023	Antenna & Wireless Technologies	NITTR, Chandigarh
33	21 <sup>st</sup> -25 <sup>th</sup> August, 2023 21 <sup>st</sup> -23 <sup>rd</sup>	Cloud Infrastructure and AWS Technologies	Brainovision Solutions India Pvt. Ltd
34	December, 2023	Inculcating Human Values in Technical Education	AICTE, Newdelhi
35	12 <sup>th</sup> -17 <sup>th</sup> February, 2024	Speech Signal Processing using Machine Learning	ATAL, AICTE
36	19 <sup>th</sup> -23 <sup>rd</sup> February, 2024	Machine Learning Using Python	NITTR, Chandigarh
37	2 <sup>nd</sup> - 6 <sup>th</sup> September, 2024	Deep Learning for Engineering Applications	NITTR, Chandigarh
38	3 <sup>rd</sup> to 7 <sup>th</sup> March, 2025	Teaching ECE Lab subjects using free Simulators	NITTR, Chandigarh

# **Certifications:**

- 1. NPTEL Online Certification Course On DIP with top 5%
- 2. NPTEL Online Certification Course On Accreditation and Outcome Based Learning
- 3. Introduction to Satellite communications 6 Week Study authorized by Institute Mines Telecom offered through Coursera, May19, 2020.
- 4. Introduction to Software Product Management 2 Week Study authorized by University of Alberta offered through Coursera, May 11, 2020.

- 5. AWS Fundamentals: Going cloud Native 5 Week Study authorized by Amazon Web Service sand offered through Coursera, June 01, 2020.
- 6. Getting Started with AWS Machine learning 5 Week Study authorized by Amazon Web Services and offered through Coursera, April 28, 2020.
- 7. IOT(Internet of Things) Wireless and Cloud computing Emerging Technologies— 6 Week Study Authorized by YONSEI university offered through Coursera, May 25, 2020.
- 8. Internet history, technology and security 10 Week Study authorized by University of Michigan offered through Coursera, April 22, 2020.
- 9. AI for everyone 4 Week Study authorized by Deep learning.ai offered through Coursera, April 16, 2020.
- 10. Pressure, Force, Motion and Humidity sensors 5 Week Study authorized by University of Colorado Boulder offered through Coursera, May 17, 2020.
- 11. Computer Architecture 11 Week Study authorized by Princeton University offered through Coursera, April 19, 2020.

### **Other Achievements:**

- 1. 100% Pass percentage in EDC& DIP
- 2. Ratified as Asst. Professor in 2012 in JNTUK
- 3. Acted as a Judge for Student Paper Presentation at AITAM Polytechnic and Engineering.
- 4. Certificate of excellence received from (MHRD) for conducting 2 weekISTE workshop.
- 5. Certificate of excellence from IIT, Madras, for the 5<sup>th</sup> phase of QEEE.
- 6. Certificate of excellence from IIT, Madras, for the 7<sup>th</sup> phase of QEEE.
- 7. Performed the duties as Observer for AP-EAMCET-2015, JNTUK.
- 8. Performed the duties as Observer for APSLPRB-2016, JNTUK.
- 9. Actively participated in 29online Webinars & Quizzes.

