DEPARTMENT OF ECE

A HALF-YEARLY NEWSLETTER

AY: 2016-17 July-Jan Vol. 9 Issue - 1



ADITYA

Institute of Technology and Management

Tekkali-532 201, Srikakulam Dist., AP <u>Tel: 0845-245666</u>, 245266, 92466 57908 Email: info@adityatekkali.edu.in

Vision of the Institute:

To evolve into a premier engineering institute in the country by continuously enhancing the range of our competencies, expanding the gamut of our activities and extending the frontiers of our operations.

Mission of the Institute:

Synergizing knowledge, technology and human resource, we impart the best quality education in Technology and Management. In the process, we make education more objective so that the efficiency for employability increases on a continued basis.

Vision of the Department:

Create high-quality engineering professionals through research, innovation and teamwork for a lasting technology development in the area of Electronics and Communication Engineering.

Mission of the Department:

- 1. To offer a well-balanced Program of instruction, lab practices, research & development activities, product incubation.
- 2. Develop accomplished technical personnel with a strong background on fundamental and advanced concepts, have excellent professional conduct.
- 3. Enhance overall personality development which includes innovative and group work exercises, entrepreneur skills, communication skills and employability.
- 4. Ensuring effective teaching-learning process to provide in-depth knowledge of principles and its applications pertaining to Electronics & Communication Engineering and interdisciplinary areas.
- 5. Providing industry and department interactions through consultancy and sponsored research.

Message from Dr. K. Someswara Rao, CHAIRMAN



At AITAM, we are committed to excellence in everything we do. We strive to mould the students in balancing intellectual and practical skills to become leaders in all the fields of Technical know-how and Management. We have created the finest facilities for the students to make the most of their scholastic pursuits. We are

closely aligned with the corporate world which ensures exchange of ideas and experiences that keep our curricula focussed on current developments and challenges in the field of engineering. We are firmly committed to research and consulting activities to contribute to the development of the discipline of engineering. Our vitality lies in our spirit of innovation. Our strength lies in our pragmatic approach. Our success lies in our will to do.

Message Sri L.L. Naidu, SECRETARY

Aditya Institute of Technology and Management is founded to meet the increasing demand for



competent engineering graduates. Within a short span of its inception, AITAM has grown to be a premier engineering college of its kind and has won laurels and kudos from the industry. The faculty and staff in AITAM are dedicated to providing first-class education that instils strong and potent basic knowledge for sound practice in

science and engineering for the well-being of the society. The Institute offers curricula that nurtures creative thinking and prepares students for productive and rewarding careers. The Institute offers programmes that deepen learning experiences of our students and prepare them for successful careers as engineers.

Message from Prof. V.V. Nageswara Rao, DIRECTOR

Engineering education at AITAM is indeed a rewarding intellectual experience. The Institute



prepares the engineering professionals of tomorrow imbued with insight, imagination and ingenuity to flourish as successful engineers. Our programs are attuned to the needs of the changing times. The classrooms are ultra-modern; the library and labs are cutting-edge; and all the members of the faculty are workaholic

professionals and masters in their fields. Not surprisingly, our students are recruited by such renowned organizations as HCL, Satyam, WIPRO, INFOSYS, TCS, Visual Soft, Innova-Solutions and InfoTech. The exceptional dedication of our students, faculty and staff, and our collaborations with Industry and other institutions ensure that the Institute is well-poised to create a unique niche in the horizons of engineering education.

Message from Dr. K.B. Madhu Sahu, PRINCIPAL



It is only through knowledge that man attains immortality. Knowledge has to expand or grow to remain as knowledge. The road to excellence is toughest, roughest and steepest in the Universe. The world requires and honors only excellence. Available information has to be directed by wisdom and intelligence to create new knowledge. Promotion of creativity is the new role of education. It is only through creative thinking that the present and future problems can be

addressed to find dynamic solutions. Technology should be used to help remove poverty from the world. In fact forty per cent of the world's poor are in India. Confidence leads to capacity. It is faith in oneself that produces miracles. Education at AITAM helps build character, strengthen the mind, expand the intellect and establish a culture of looking at problems in a new perspective. The student is put through rigorous training so that he can stand on his own feet after leaving the portals of the Institute.

Message from Dr. Sateesh Kumar, H.O.D of ECE



Aditya Institute of technology and management (AITAM) is one among the reputed engineering colleges imparting finest quality education. The department of Electronics and Communication Engineering was established in the year 2001. Our aim is to produce graduates capable of effectively using professional skills with values for betterment of society and to meet the varying demands of industry and research environment. The department is well equipped with significant infrastructural design and state of art

laboratories for both academics and research purpose.

Our department has a fine blend of a team of qualified and experienced faculty. The faculty members have excellent academic credentials. The notable asset of our department is the available diversity of expertise and highly motivated, well experienced faculty members ensure quality education from our department. The faculty and students are associated with memberships of professional bodies such as Institution of Electronics and Telecommunications Engineering (India), Institution of Engineers (India), Indian Society for Technical Education.

Our students earned name and fame all over the globe and rendering best of their services to topmost companies. The department of ECE endeavors to provide to our students best professional opportunities and look forward their bright future. We as a team resolve to take the department to heights of success and prepare our students for future challenges. We are striving hard continuously to improve upon the quality of education. Our goal is to ensure that the education we provide opens the doorway to greater opportunities.

JULY 2016-DECEMBER 2016

Faculty publications

- M N V S S Kumar A new method of target tracking by EKF using bearing and elevation measurements for underwater environment Vol 74, Issue 1, Pp 221-228 Dec, 2015 0921-8890
- 2. K.ChidhambarmRao has published a paper titled Submarine Based Communication over Years: A Review International Journal of Innovative Research in Science, Engineering and Technology Vol. 5, Issue 12, December 2016
- 3. Sri A. S. Srinivasa Rao Analysis of steganographic colour image by using integer wavelet transformation Vol 10, Issue 2, Pp 66-76 October, 2015 2454-1796
- 4. A. S. Srinivasa Rao has published a paper titled Submarine Based Communication over Years: A Review International Journal of Innovative Research in Science, Engineering and Technology Vol. 5, Issue 12, December 2016
- A. S. Srinivasa Rao has published a paper titled DESIGN AND IMPLEMENTATION OF LOW POWER ALU USING CLOCK GATING AND CARRY SELECT ADDER International Journal of Electronics and Communication Engineering and Technology Volume 7, Issue 3, May–June 2016, pp. 116–129
- 6. A Rajesh has published a paper DESIGN AND IMPLEMENTATION OF LOW POWER ALU USING CLOCK GATING AND CARRY SELECT ADDER International Journal of Electronics and Communication Engineering and Technology Volume 7, Issue 3, May–June 2016, pp. 116–129
- 7. B.Rama rao has published a paper titled Implementation of Octagonal and Hexagonal Microstrip Patch Antennas for UWB Applications SSRG International Journal of Electronics and Communication Engineering (SSRG-IJECE) Volume 3 Issue 9 September 2016
- 8. V.Ashok Kumar has published a paper titled Digital Watermarking Approach Based on Edge Based Sorted Pixel Value Difference (ESPVD) Indian Journal of Science and Technology Vol 9(S1), , December 2016
- 9. K. Chitambararao has published a paper titled Design and Realization of PracticalFIR Filter Using Hybrid Window and CSD Algorithm IOSR Journal of VLSI and Signal Processing (IOSR-JVSP)Volume 6, Issue 6, Ver. II (Nov. Dec. 2016), PP 21-28
- 10. E.Jaya has published a paper titled Design and Realization of PracticalFIR Filter Using Hybrid Window and CSD AlgorithmIOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 6, Issue 6, Ver. II (Nov. Dec. 2016), PP 2
- 11. T.Viswanadham has published a paper titled Design and Realization of PracticalFIR Filter Using Hybrid Window and CSD Algorithm IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 6, Issue 6, Ver. II (Nov. Dec. 2016)
- 12. L.Rambau has published a paper titled Design and Realization of PracticalFIR Filter Using Hybrid Window and CSD Algorithm IOSR Journal of VLSI and Signal Processing (IOSR-JVSP)Volume 6, Issue 6, Ver. II (Nov. Dec. 2016), PP 21-31

- 13. Dr.M.N.V.S.S.Kumar has published a paper titled Design of Area efficient Conditional CMOS 8-bit Magnitude Comparator International Journal & Magazine of Engineering, Technology, Management and Research Volume No: 3 (2016), Issue No: 9 (September)
- 14. J.Swathiv has published a paper titled Design of Area efficient Conditional CMOS 8-bit Magnitude Comparator International Journal & Magazine of Engineering, Technology, Management and Research Volume No: 3 (2016), Issue No: 9 (September)
- 15. G Sateesh Kumar has published a paper titled GPS Position Estimation Using Integer Ambiguity Free Carrier Phase has published a paper titled Measurements International Journal of Engineering and Technology (IJET) Vol 8 No 6 Dec 2016
- 16. M N V S S Kumar has published a paper titled GPS Position Estimation Using Integer Ambiguity Free Carrier PhaseMeasurements International Journal of Engineering and Technology (IJET) Vol 8 No 6 Dec 2016-Jan
- 17. K Chitambararao has published a paper titled Design and simulation of a noval Bifilar Helix Antenna combining GPS,GLONASS,IRNSS and S-Band communications International journal of control theory and applicationsVol-9 no.43 page 543-552Dec 2016
- 18. K Chitambararao has published a paper titled Study of cross dipole antenna for UHF Satellite communication application and its limitations ISRO JECEC Artical Id D73091
- 19. M L Naidu has published a paper titled Implementation of Octagonal and Hexagonal Microstrip Patch Antennas for UWB Applications SSRG International Journal of Electronics and Communication Engineering (SSRG-IJECE) Volume 3 Issue 9 – September 2016
- 20. M L Naidu has published a paper titled Performance Analysis Of Multihop-Gateway Energy Aware Routing (M-Gear) Protocol For Wireless Sensor Networks IOSR Journal Of Humanities And Social Science (IOSR-JHSS) Volume 21, Issue11, Ver. 9 (Nov. 2016) PP 01-07
- 21. Sri D. Yugandhar has published a paper titled "Image de-noising with the Aid of Dual Tree Wavelet Transform and Artificial Bee Colony Optimization Algorithm i-manager's Journal on Image Processing Vol. 3, No. 4, October December 2016
- 22. Sri D. Yugandhar has published a paper titled A Heuristic Speech De-noising with the aid of Dual Tree Complex Wavelet Transform using Teaching-Learning Based Optimization International Journal of Engineering and Technology (IJET) Vol. 8, No. Issue 5 ,pp. 1967-1980
- 23. M.V.H.Bhaskara Murthy has published a paper titled Performance Analysis Of Multihop-Gateway Energy Aware Routing (M-Gear) Protocol For Wireless Sensor Networks IOSR Journal Of Humanities And Social Science (IOSR-JHSS) Volume 21, Issue11, Ver. 9 (Nov. 2016) PP 01-07
- 24. K Chitambararao has published a paper titled Design and Realization of practical FIR filter based on CSD and DA algorithmsIOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 6, Issue 4, Ver. II (Jul. Aug. 2016), PP 40-49

- 25. T Viswanadham has published a paper titled Design and Realization of practical FIR filter based on CSD and DA algorithms IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 6, Issue 4, Ver. II (Jul. Aug. 2016), PP 40-49
- 26. B. Chinnarao has published a paper titled Design and Realization of practical FIR filter based on CSD and DA algorithms IOSR Journal of VLSI and Signal Processing (IOSR-JVSP) Volume 6, Issue 4, Ver. II (Jul. Aug. 2016), PP 40-49
- 27. D.Harihara Santosh has published a paper titled Impact of Face Partitioning On Face Recognition Performance IOSR Journal of Computer Engineering (IOSR-JCE) Volume 18, Issue 4, Ver. I (Jul.-Aug. 2016), PP 90-103
- 28. D.Harihara Santosh Performance Metrics for Eigen and Fisher Feature Based Face Recognitation Algorithms International Journal of Computer Science and Network Security Volume 16, Issue 6, Ver. I june 2016 PP 157-167
- 29. D.Harihara Santosh has published a paper titled Improved Face Recognition Rate Using HOG Features and SVM Classifier IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) Volume 11, Issue 4, Ver. I (Jul.-Aug .2016), PP 34-44
- 30. Y.SrinivasaRao has published a paper titled Medical image De-Noising using Hybrid methodology with wavelets and guided filter IOSR-JECE Volume 11, Issue 4, Ver. I (Jul-Aug .2016), PP 01-05.
- 31. MSR Naidu has published a paper titledMedical image De-Noising using Hybrid methodology with wavelets and guided filter IOSR-JECE Volume 11, Issue 4, Ver. I (Jul-Aug .2016), PP 01-05.
- 32. MSR Naidu has published a paper titled Hybride gravitational search algorithm and pattern search based evaulationary image thresholding for image segmentation internation journal of digital content technology and its applications(JDCTA)
- 33. B. Chinnarao has published a paper titled AN IMAGE DENOISING FRAMEWORK USING DD-DT-CWT AND FUZZY BASED SHRINKINGALGORITHM International Journal of Computers, Electrical and Advance Volume 1, Issue 9, PP: 144 149, JAN JUL' 2016.
- 34. B. Chinnarao has published a paper titled An Efficient Hybrid Parallel Prefix Adders for Reverse Converters using QCA Technology International Journal of Computer Applications Volume 153 No.1,November 2016
- 35. G Sateesh Kumar has published a paper titled Hand off probability Analysis of GSM Cellular Networks CIIT Wireless Communication vol 3,No-3 2016
- 36. M N V S S Kumar has published a paper titled Hand off probability Analysis of GSM Cellular Networks CIIT Wireless Communication vol 3,No-3 2016
- 37. Laxmi.Vandana has published a paper titled Hand off probability Analysis of GSM Cellular Networks CIIT Wireless Communication vol 3,No-3 2016
- 38. M.BalaKrishna has published a paper titled Hand off probability Analysis of GSM Cellular Networks CIIT Wireless Communication vol 3,No-3 2016

- 39. Dr.M.N.V.S.S.Kumar has published a paper titled Design of High Directive Planar Antenna Using Scheikunoff polynomialCIIT Wireless Communication vol 8,No-4 2016
- 40. S.Umamaheswara Rao Design of High Directive Planar Antenna Using Scheikunoff polynomial CIIT Wireless Communication vol 8,No-4 2016
- 41. P.Sireesh Kumar has published a paper titled Design of High Directive Planar Antenna Using Scheikunoff polynomial CIIT Wireless Communication vol 8,No-4 2016

FACULTY CONFERENCES

- 1. Sri P.V. Muralidhar Assoc. Professor, has presented a paper titled FRFT Low pass Filter for Time delayed Signals International Conference on EET Dec .7-8, 2016 Singapore
- 2. E.Jaya Assist. Professor, has presented a paper titled Design and Realization of Practical FIR Filter using Fractional Fourier Transform and CSD Algorithm International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India
- 3. K. Chitambara Rao Assoc. Professor, has presented a paper titled Design and Realization of Practical FIR Filter using Fractional Fourier Transform and CSD Algorithm International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India
- 4. Dr. A.S.Srinivasa Rao Professor, has presented a paper titled Design and Realization of Practical FIR Filter using Fractional Fourier Transform and CSD Algorithm International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India
- 5. Dr. MNVSS Kumar Assoc. Professor, has presented a paper titled Analysis of X-ray images using MRA based biorthogonal wavelets for detection of minute fractures International conference on science, & Management research Vel Tech multitech Dr. Rangarajan Dr. Sakunthala Engg. College, Chennai, Tamilnadu, INDIA
- 6. Dr. M. N. V. S. Santosh Kumar Assoc. Professor has presented a paper titled A Novel Multipath Mitigation Technique for SPSGPS Receivers in Indian Urban Canyons International Conference on Signal, Networks, Computing, and Sy stems Springer, New Delhi.
- 7. M.N.V.S.S Kumar Assoc. Professor, has presented a paper titled A Heuristic 3D Construction Algorithm for Detection of Tumor in Magnetic Resonance Imaging Slices SP-HCMCP 2016 Oct 25 27 2016, Hyderabad, India
- 8. M.S.R Naidu Assoc. Professor, has presented a paper titled Tsallis entropy based image thresholding for image segmentation International conference on computational intelligence in data mining(ICCIDM2016) 10,11,dec 2016

FACULTY DEVELOPMENT PROGRAMME/WORKSHOPS ORGANIZED

 Sri. P.V.Muralidhar conducted a National conference on recent developments in RF and Microwave communications Dr.S.K.Behera Professor,NIT Rourkela Dept of ECE 23-24 aug 2016





2. A one week faculty development program on advances communication technology









STUDENTS ACHIVEMENTS

S.No.	Nature of the Activity	Student Name &	Class	Name of the Event and	Dates	Awards
1		Regd. No. S Santhosh		Venue TECHNOZION	21 st -22 nd	
	Robogenesis	Krishna 14A51A04C9	III-C	NIT, Warangal.	OCT 2016	Participation
2	Robogenesis	S vinod 14A51A04D1	III-C	TECHNOZION NIT,Warangal.	21 st -22 nd OCT 2016	Participation
3	Robogenesis	S Srikanth 14A51A04C7	III-C	TECHNOZION NIT,Warangal.	21 st -22 nd OCT 2016	Participation

FACULTY ACHIEVEMENTS

1. International conference on innovation in computers ,Electrical and Electronics Engineering Technology(ICEEET) Singapore



STUDENT ACHIEVEMENTS

S.No.	Nature of the Activity	Student Name & Regd. No.	Class	Name of the Event And Venue	Dates
1	PPT on A New Revolutionary System to detect human beings buried under earth quack rubble by Microprocessors and Microcontrollers	K. Vijay Kumar 14A55A0412	III ECE-A	TECHNOZION, NIT WARANGHAL	30, 31 November, 2015
2	FOXHUNT	H. Shanmukha rao	III ECE-A	TECHNOZION, NIT WARANGHAL	30, 31 November,

		(13A51A0455)			2015
		B. Bhagavath			
		Dev			
		(13A51A0414)			
		B. Surendra			
		(13A51A0418)	III ECE-A	TECHNOZION, NIT WARANGHAL	30, 31
3	FOXHUNT				November,
		Jesse Evans			2015
		(13A51A0413)			
		A.L. Prasanna			
4 AREIAL TRAMLINE	ADEIAI	(14A51A0404)		TECHNOZION, NIT WARANGHAL	30, 31
			II ECE-A		November,
		B. Swetha			2015
		(14A51A0426)			
5	5 PPT	K.G. Prasoona	II ECE-B	GUSAC	8^{th} -10 th ,
3		(14A51A0471)	II ECE-B	CARNIVAL,GITAM,VIZAG	October-2015
6 PPT		M. Anil Varian	II ECE-B	TECHNICHE, IIT GOUHATI	3 rd -6 th
	PPT	M. Anil Kumar			September-
		(14A51A0488)			2015
7	PPT	V. Vinov		TECHNICHE, IIT GOUHATI	3 rd -6 th
		V. Vinay (14A51A04G3)	II ECE-C		September-
		(14A31A04G3)		GOUHATI	2015

INDUSTRIAL TOURS

Year	Section	Date(s) of	Place
		visit	
III	III-ECE	28/11/2016	LONG TOUR
	A,B,C	-	
		05/12/2016	
III	ECE A	31/12/16	All Indian Radio VSKP
III	ECE B	15/10/16	All Indian Radio VSKP
III	ECE C	24/12/16	All Indian Radio VSKP
II	ECE C	30/12/16	All Indian Radio VSKP









GUEST LECTURES

- 1. Dr. D.Ranghanath, Deputy director doordarshan, has delivered a guest lecture on Global positioning system On 18-07-16
- 2. Dr.Raj kumar goswamy,Indian Navy Commodore,visakhapatnam, has delivered a guest lecture on Advanced communication systemsOn 25-07-16



- 3. Sri Y.Gopala rao, Rtd Professor A.U, has delivered a guest lecture on Antennas On 01-08-16
- 4~ Sri G.Tirumalarao , Rtd Professo , has delivered a guest lecture on Image processing On 01-08-15



5 Prof S.K.Nayak, has delivered a guest lecture on Embedded systems On 16-08-16

Editorial Board Faculty

- 1. Dr.P. Prasantham
- 2. P.Kameswara Rao

STUDENTS

- 1. Boyina Suma, IV ECE-A
- 2. Muni Rohit Rushi, IV ECE-A
- 3. Vaddadi Srivani, IV ECE-A



ADITYA

Institute of Technology and Management

Tekkali-532 201, Srikakulam Dist., AP <u>Tel: 0845-245666</u>, 245266, 92466 57908 Email: <u>info@adityatekkali.edu.in</u>