

DEPARTMENT OF ECE

A HALF-YEARLY NEWSLETTER

AY: 2014-15	July-Dec	Vol. 7	Issue - 1
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ADITYA

Institute of Technology and Management

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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 2014-DEC 2014

FACULTY PUBLICATIONS

1. Dr. MNVSS Kumar Assistant Professors, published a paper titled Design of Biorthogonal wavelets based on parameterized filter for the Analysis of X-ray Images Vol 2, No. 32, pp99-110, Dec, 2014 978-81-322-2207-1 (print ISBN) 78 81-322-2208-8 (Online ISBN) 2190-3018 (ISSN)
2. Sri V. Ashok Kumar, Smt. R. Kranthi Assoc. Proff, Assistant Professor, published a paper titled High speed RC4 algorithm based on true dual port RAM by using verilog HDL. Volume 4, Issue 7, pp 22-27 Dec, 2014 e-ISSN:2278-3075
3. Sri B.Chinnarao Assoc. Professors, published a paper titled High efficient carry select adder using zero carry look ahead adder Volume 18, Issue 1, PP 42-46 Dec, 2014 ISSN:2231 -5381
4. Sri. B. Rama Rao Assistant Professors, published a paper titled Design of CPW-Fed Monopole Antenna with L- shape and T-shape for WLAN/Wi-MAX Applications Volume 5, Issue 12, Pp 594-598 Dec, 2014 ISSN 2229-5518
5. Dr. G. Sateesh Kumar Professor, published a paper titled A Novel architecture for radix - 4 pipe lined FFT processor using vedic mathematics algorithm Volume 9, Issue 6, pp:23-31 Nov, 2014 e-ISSN : 2278-2834, p-ISSN:2278-8735
6. Sri B.Chinnarao Assoc. Professor, published a paper titled Optimization of 1D and 2D cellular automata for pseudo random number generator Volume 4, Issue 6, PP 28-33 Nov, 2014 e-ISSN:2319 -4200 P-ISSN:2319-4197
7. Sri D. Yugandhar Assoc. Professors, published a paper titled Performance analysis of block PSO for image De-noising using wavelet transform Volume 9, Issue 6, & Page No.:32-37 Nov, 2014 e-ISSN:2278-2834P-ISSN:2278-8735
8. Dr. B. Rama Rao, Sri L. Rambabu Professor, Assistant Professor, published a paper titled Design and analysis of Plus shape slotted fractal antenna for dual band plications. Volume 4, Issue 5, & Page No.:29-36 Oct, 2014 ISSN (P):2249-684X ISSN(E): 2249-7951
9. Smt. K.V.L. Bhavani Assoc.Professors, published a paper titled Area Efficient Higher Order FIR Filter Design Using Improved Distributed Arithmetic with Lookup Tables Volume 4, Issue 1, PP 213-216 Oct, 2014 ISSN : 2249-8958
10. Dr. A.S.Srinivasa Rao Professors, published a paper titled Design of OFDM based acoustic communication system using FPGA Vol. 5, No.4, P.P 1285-1288 Oct, 2014 ISSN 2249=-6556
11. Dr. A.S.Srinivasa Rao Professors, published a paper titled A lowpwer VLSI Design of an all digital phase locked loop Vol. 16, Issue No. 6 P.P 288-292 Oct, 2014 ISSN 2231-5381
12. MNVSSKumar Y Ramana Murty, M Bala Krishna Assoc.Professors, published paper titled Effect of Range Resolution on the performance of Monotonic and Chirp Technology Sonar Vol.6, No. 6, pp 14-18 Oct, 2014 0974 – 9594
13. Sri. B. Rama Rao Professors, published a paper titled Design of Low Area Branch Penalty Free Pipelined Processor Architecture Vol. 5, Issue 3, Pp 41-43 Sep, 2014 ISSN : 2230-7109 (Online) | ISSN : 2230-9543 (Print)

14. Sri V.Lokesh Raju, Sri P. Sirish Kumar Assoc.Professor, Assit.Professors, published a paper titled Implimentaion of Hybrid model image fusion algorithm Volume 9, Issue 5, & Page No.:17-22 Sep, 2014 e- ISSN:2278-2834P-ISSN:2278-8735
15. Sri M.S.R. Naidu Assco.Professors, published a paper titled An automated threshold selection using wavelet based PSO for image compression. Volume 9, Issue 5, & Page No.:26-31 Sep, 2014 e-ISSN:2278-2834P-ISSN:2278-8735
16. Sri MVH Bhaskara Murty Assco Professors, published a paper titled FPGA Implimentation of Viterbi Algorithm fir Decoding Of Convolution Codes. Vol4, Issue 5, Pp 46-53 Sep,2014 2319-4197
17. Sri MVH Bhaskara Murty Assco Professors, published a paper titled Enhanced Multipath Optimized Link State Protocol for MANETs Vol 9, Issue 5, pp 1-10 Sep,2014 2319-4197
18. Sri P.V. Muralidhar, Sri D.V.L.N. Shastry Assco Professors, published a paper titled Performance analysis of FrFT based adoptive filters with LMS algorithm Volume 99- Issue 6, Pp 15-19 August, 2014 ISSN: 0975-8887
19. Dr. G. Sateesh Kumar Professors, published a paper titled GPS Satellite position error analysis for precise navigation application Volume 5, Issue 3, Pp 89-93 July, 2014 e-ISSN : 2230-7109, p-ISSN:2230-9543
20. Muralidhar, P V; Nayak,Assco Professors, published a paper titled Generalization of Fixed And Flexible Window Functions Vol.2,Iss.3, pp-9-13 Jul, 2014 2321-7480
21. Muralidhar, P V Assco Professors, published a paper titled A new class of infinite impulse response (IIR) filters Vol.2,Iss.3, pp-31-35 Jul, 2014 2321-7480
22. Dr. G. Sateesh Kumar Professors, published a paper titled Leakage power reduction in CMOS circuits using leakage control transistor technique Volume 5, Issue 1, pp:1-7 July, 2014 ISSN : 2231-1246

FACULTY DEVELOPMENT PROGRAMME/WORKSHOPS/CONFERENCES ATTENDED

1. Sri. V. Ashok kumar 11 & 12, Dec, 2014 Research & Teaching Methodologies in Electrical Engineering IIT,Hyderabad
2. Sri. D. Yugandhar 22 - 26, Sep, 2014 Advanced Engineering Optimization Through Intelligent Techniques (AEOTIT) Sardhar Vallabhabhai National Institute of Technology, Surath
3. Sri M.Jaya manmadha rao 15th & 16th November, 2014.Twenty First Century, the down of Digital Era: Pedagogical Issues of Technical Teachers AITAM, Tekkali
4. Sri M.Jaya manmadha rao 6th December 2014 A One Day Workshop on Outcome Based Education AITAM, Tekkali
5. Sri M.Jaya manmadha rao 9th March 2015 A One Day Workshop on Outcome Based EducationAITAM, Tekkali

FACULTY DEVELOPMENT PROGRAMME/WORKSHOPS ORGANIZED

1. A One Day Workshop on '*Outcome Based Education*' was conducted on 17th Aug, 2014. The speaker were Dr. A. Koteswara Rao & Dr. N. Vijaya Sai, V.R. Siddhartha Engineering College, Vijayawada.

2. A One Day Workshop on ‘*Outcome Based Education*’ was conducted on 16th Dec, 2014. The speaker was Dr. K. Chandra Bhushana Rao, JNTUK, Vizayanagaram.

STUDENTS PARTICIPATION

1	Leakage power reduction in cmos circuits using leakage control transistors technique	B.vanitha (12A51D5701) Dr.G.Sateesh Kumar	<i>International Journal of Electronic and Communication Research (IJEER)</i> . Vol.-5, Number-1 ISSN-ISBN NO 2231-1246, 2014	International
2	A new class of IIR filters	G.deepak (12A51D5702) P.V.Muralidhar	IMJDSP Vol.-2 Number-3, 2014	International
3	Design of OFDM based acoustic communication system using FPGA	M.divya (12A51D5703) A.S.Srinivasa Rao R.V.Kiran Kumar	<u>International Journal of VLSI and Embedded Systems</u> Vol.-5. Artrial:09458 ISSN-ISBN NO 2249-6556, Oct2014	International
4	The power optimization of linear feedback shift register using fault coverage circuit	K.yarrayya (12A51D5704) K.Chitambara Rao	<i>International Journal of Scientific Engineering and Research (IJSER)</i> Vol.-5 Issue-9 ISSN-ISBN NO 2229-5518, Sep 2014	International
5	A novel architecture for radix-4 pipeline FFT processor using vedic mathematics algorithm	K.naresh (12A51D5706) Dr.G.Sateesh Kumar	International Organization Of Scientific Research journal of ECE IOSR-JECE Vol.-9, Issue-6 ISSN-ISBN NO E2278-2834, NOV-DEC2014 P2278-8735	International
6	Design of low area branch penalty free pipeline processor architecture	K.rajesh (12A51D5707) B.Rama Rao	<i>International Journal Of Electronics And Communication Technology (Iject)</i> Vol.-5 Issue-4 Issn-Isbn No 2230-9543, OCT-DCE2014	International
7	FPGA	K.santhoskuma	International Organization Of	

	implementation of viterbi algorithm for decoding convolution codes	r (12A51D5709) M.V.H.Bhaskara Murthy	Scientific Research journal of VLSI and signal processing IOSR-JVSP ,Vol.-4 Issue-5 ISSN-ISBN NO E2319-4200 P2319-4197, SEP-OCT 2014	International
8	A low power VLSI design of an digital phase locked loop	N.vydeshi (12A51D5711) A.S.Srinivasa Rao	<i>International Journal of Engineering Research and Technology IJET</i> Vol.-16 Number-6 ISSN-ISBN NO 2231-5381, OCT 2014	International
9	Implementatio n of hybrid model image fusion algorithm	S.sridhar (12A51D5715) V.Lokesh Raju P.Sirish Kumar	International Organization Of Scientific Research journal of ECE IOSR-JECE, Vol.-9 Issue-5 ISSN-ISBN NO E2278-2834 P2278-8738, SEP-OCT2014	International
10	Performance analysis of block pso for image denoising using wavelet transform	Y.sravani (12A51D5716) D.Yugandhar S.K.Nayak	International Organization Of Scientific Research journal of ECE IOSR-JECE, Vol.-9 Issue-6 ISSN-ISBN NO E2278-2834 P2278-8735, NOV-DEC2014	International

STUDENT ACHIEVEMENTS

1. B.vanitha(12A51D5701) has published a paper titled Leakage power reduction in cmos circuits using leakage control transistors technique) *International Journal of Electronic and Communication Research (IJECE)*.Vol.-5, Number-1 ISSN-ISBN NO 2231-1246, 2014 International Publication
2. G.deepak (12A51D5702) has published a paper titled A new class of IIR filters IMJDSP Vol.-2 Number-3, 2014 International Publication
3. M.divya (12A51D5703) has published a paper titled Design of OFDM based acoustic communication system using FPGA International Journal of VLSI and Embedded Systems__Vol.-5. Artial:09458 ISSN-ISBN NO 2249-6556, Oct2014 International Publication
4. K.yarrayya (12A51D5704) has published a paper titled The power optimization of linear feedback shift register using fault coverage circuit *International Journal of Scientific*

Engineering and Research (IJSER) Vol.-5 Issue-9 ISSN-ISBN NO 2229-5518, Sep 2014
International Publication

5. K.naresh (12A51D5706) has published a paper titled A novel architecture for radix-4 pipeline FFT processor using vedic mathematics algorithm International Organization Of Scientific Research journal of ECE IOSR-JECE Vol.-9, Issue-6 ISSN-ISBN NO E2278-2834, NOV-DEC2014 P2278-8735 International Publication
6. K.rajesh (12A51D5707) has published a paper titled Design of low area branch penalty free pipeline processor architecture *International Journal Of Electronics And Communication Technology (Iject)* Vol.-5 Issue-4 Issn-Isbn No 2230-9543, OCT-DCE2014 International Publication
7. K.santhoskumar (12A51D5709) has published a paper titled FPGA implementation of viterbi algorithm for decoding convolution codes International Organization Of Scientific Research journal of VLSI and signal processing IOSR-JVSP ,Vol.-4 Issue-5 ISSN-ISBN NO E2319-4200 P2319-4197, SEP-OCT 2014 International Publication
8. N.vydeshi (12A51D5711) has published a paper titled A low power VLSI design of an digital phase locked loop *International Journal of Engineering Research and Technology IJET* Vol.-16 Number-6 ISSN-ISBN NO 2231-5381, OCT 2014 International Publication
9. S.sridhar (12A51D5715) has published a paper titled Implementation of hybrid model image fusion algorithm International Organization Of Scientific Research journal of IOSR-JECE, Vol.-9 Issue-5 ISSN-ISBN NO E2278-2834 P2278-8738, SEP-OCT2014 International Publication
10. Y.sravani (12A51D5716) has published a paper titled Performance analysis of block pso for image denoising using wavelet transform International Organization Of Scientific Research journal of ECE IOSR-JECE, Vol.-9 Issue-6 ISSN-ISBN NO E2278 2834 P2278-8735, NOV-DEC2014 International Publication

INDUSTRIAL TOURS

Year	Section	Date of visit	Place
III	ECE-C	22/11/14	RADAR, Visakhapatnam



GUEST LECTURES

1. Prof S.K.Nayak, has delivered a guest lecture on TMS320CX processor On 9-08-14



- 2 Sri R.Radhakrishna, senior consultant, has delivered a guest lecture on CTS, Hyderabad Software testing methodologies On 16-08-14



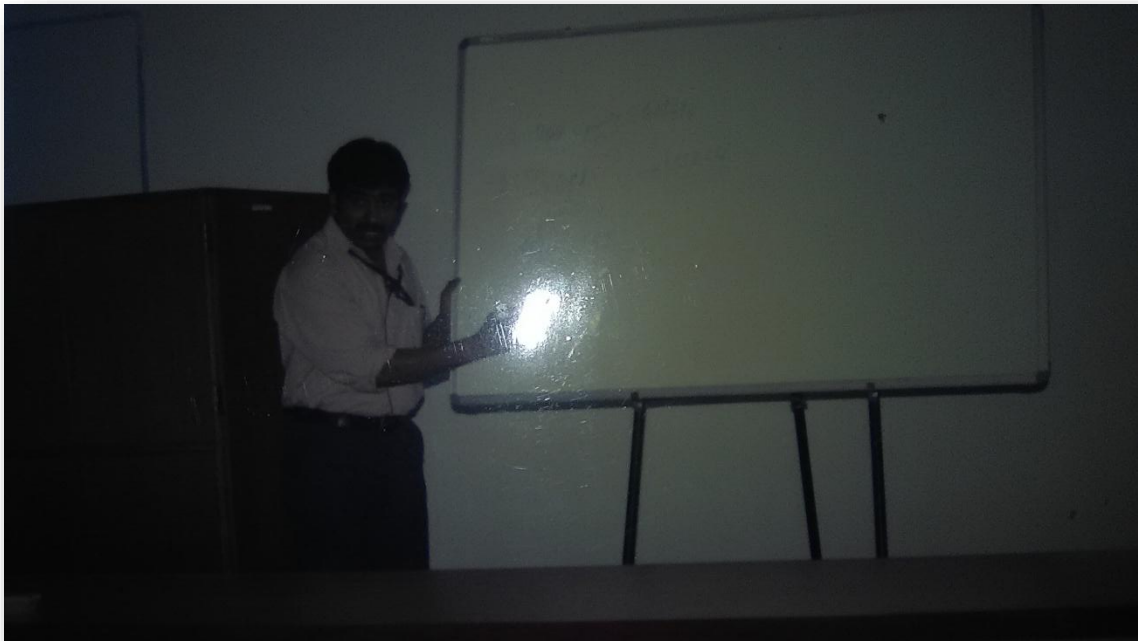
- 3 Sri D.Pavan ,scientist C, ISRO, has delivered a guest lecture on Radar systems On 23-08-14



- 4 Smt P.Vijaya , has delivered a guest lecture on lakshmi,EA, Prasrabharathi, vijayawada



- 5 Sri M.Suman, EA, Prasrabharathi, vijayawada, has delivered a guest lecture on Advances in digital communication On 04-10-14



- 6 Sri J.Lakshman kumar TTA Basics in Telecommunication On 27-09-14

**Editorial Board
Faculty**

1. P. Kameswara Rao
2. L. Rambabu

STUDENTS:

1. B. Sandeep , IV-ECE- A
2. V. Madhuri, IV-ECE-B
3. K. Lalit Kumar, IV-ECE-A



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