DEPARTMENT OF CSM & CSD

A HALF-YEARLY NEWSLETTER

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ADITYA

Institute of Technology and Management

(An autonomous institution)

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ADITYA

Institute of Technology and Management

(An autonomous institution)

Department of CSM

Vision and Mission of the Institute

Vision

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

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 efficiency for employability increases on a continued basis.

Vision and Mission of the Department

Vision

To develop competent and socially responsible engineers in the domain of ArtificialIntelligence & Machine Learning, Data Science for noteworthy contributions to the society.

Mission

M1. To educate the students in fundamental principles of computing and develop the skills needed to solve practical problems using contemporary computer-based technologies.
M2. To provide State-of-the-art computing laboratory facilities to promote industry-institute interaction to enhance student's practical knowledge.
M3. To inculcate self-learning abilities, team spirit, and professional ethics among the students to serve society.

Chairman's Message



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 focused 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.

Dr. K. Someswara Rao
CHAIRMAN

Secretary's Message



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 instills 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.

Sri L.L. Naidu
SECRETARY

Director's Message



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.

Prof. V.V. Nageswara Rao
DIRECTOR

Principal's Message



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.

Dr.A.S.Srinivasarao
PRINCIPAL

HOD's Message



The Department of **CSM** strongly committed to impart innovative and quality technical education with high standards. The field of Artificial Intelligence & Machine Learning is a diverse field which has a significant role in the development of cutting edge technology. The faculty of the department is committed to prepare our students by providing the expertise and proficiency in Artificial Intelligence and its related fields needed to thrive in modern society. ML has become a fundamental tool for augmenting the human knowledge, which is an essential part of creation, discovery and innovation. The main goal of the Department is to provide experimental learning opportunities such as hands-on training, project-based courses, research projects and internships which provide a solid foundation to work in interdisciplinary teams that invent the future. The curriculum at the Department of AI&ML at is meticulously planned and continuously updated in way to incorporate the various demands of the IT industry trends. An exposure to real world problems in this era of technology is a must and the every candidate is provided with the right environment to shape into a confident individual having the necessary skill set to fit in any role at the industrial market.

Dr.M.V.B ChandraSekhar

HOD of CSM Department

Conferences Attended:

1. Integrated Internet of Things and Artificial Intelligence System for Real-Time Multi-Nutrient Water Quality Analysis in Agriculture

Pradeep Kumar Mahapatro Rasmita Panigrahi Neelamadhab Padhy

Abstract

Background: Drinking water that is clean and safe is important for everyone's health. About 1.4 million deaths worldwide occur due to contaminated drinking water each year. Contaminated water sources are the primary cause of diarrheal infections, which account for about 505,000 deaths every year. To overcome these challenges, this work proposes an integrated IoT- and AI-based solution for real-time multi-nutrient water quality analysis. Objective: In this paper, we aim to develop a complete integrated with an IoT-based water nutrient analysis system using advanced machine learning models that can predict multiple nutrient levels to improve crops and increase the interpretability, reliability, and security of water quality monitoring systems. Material/Method: For data collection, we deployed IoT sensors in different water sources like reservoirs, irrigation canals, and ponds for continuously monitoring parameters including phosphorus (P), potassium (K), pH, temperature, and BOD. The data that we collected from the sensors were securely transmitted to a cloud-based platform using end-to-end encryption protocols. Advanced machine learning classifiers and ensemble learning algorithms were used to analyze the real-time data to produce multi-nutrient predictions. The dataset was collected from GIETU agricultural fields over 6 months from 1 January to June 2024. We also used explainable AI (XAI) techniques to interpret the machine learning algorithms. Result: Performance metrics like accuracy, precision, recall, and F1-score were calculated for the water quality prediction. Our experimental observations revealed that the RFS ensemble classifier (Random Forest + SVM) performed well in comparison to other models and had an accuracy of 90%. The hybrid classifier was significantly better than the traditional approaches. We also used XAI techniques to increase the interpretability of the classifiers to enable effective decision-making for water management. For data security, we used encryption and decryption algorithms to ensure data integrity and protection from unauthorized access.

FACULTY DEVELOPMENT PROGRAMME/WORKSHOPSATTENDED

S.No.	Name of The Faculty	Name of The Programme	Dates	Venue
1	Smt. Kurman Sangeetha	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
2	Sri. Pradeep Kumar Mahapatro	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
3	Smt.V. Yamuna	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
4	Sri.Dasaradha Arangi	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
6	Sri. K.Srinivasa Rao	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
7	Smt. K.Sakunthala	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
8	Sri.N.Sai Kiran	FDP On "Preparing Students for Placements and Higher Studies"Collaboration *with NITTTR Chandigarh*	05.08.2024 to 09.08.2024	AITAM,Tekkali
9	Dr. M.V.B.Chandrasekhar	FDP On "Tools for Research in Cloud,Fog and Edge Computing "Collaboration *with NITTTR Chandigarh*	21.10.2024 to 25.10.2024	AITAM,Tekkali

10	Smt. Kurman Sangeetha	FDP On "Tools for Research in Cloud,Fog and Edge Computing "Collaboration *with NITTTR Chandigarh*	21.10.2024 to 25.10.2024	AITAM,Tekkali
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14	Sri. K.V.Chandra Sekhar	FDP On "Tools for Research in Cloud,Fog and Edge Computing "Collaboration *with NITTTR Chandigarh*	21.10.2024 to 25.10.2024	AITAM,Tekkali
15	Smt. K.Srinivasa Rao	FDP On "Tools for Research in Cloud,Fog and Edge Computing "Collaboration *with NITTTR Chandigarh*	21.10.2024 to 25.10.2024	AITAM,Tekkali
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18	Sri.N.Seeatayya	FDP On "Tools for Research in Cloud,Fog and Edge Computing "Collaboration *with NITTTR Chandigarh*	21.10.2024 to 25.10.2024	AITAM,Tekkali
19	Smt. K.Srinivasa Rao	Kidney Tumor detection using YOLOv8 : Cutting-Edge Deep Learning method for early Diagnosis	04.12.2024 to 05.12.2024	6th International Conference ON IPDIMS-NIT ROURKELA
20	Smt. K.Srinivasa Rao	Alzheimer's Disease Detection using YOLOv8: A Cutting-Edge Deep Learning method for early Diagnosis	04.12.2024 to 05.12.2024	6th International Conference ON IPDIMS-NIT ROURKELA
21	Sri.Dasaradha Arangi	An Integrated Machine Learning Approach to Stoke Prediction	04.12.2024 to 05.12.2024	6th International Conference ON IPDIMS-NIT ROURKELA
22	Sri.Dasaradha Arangi	Malicious URL Detection Using Logistic Regression	04.12.2024 to 05.12.2024	6th International Conference ON IPDIMS-NIT ROURKELA





సోమవారం 19 ఆగస్టు 2024

సాక్షి

ఐతమ్‌లో నూతన పుస్తకావిష్కరణ

నిజం న్యూస్, చిక్కోలి : చిక్కోలి అదిత్య ఇన్‌స్టిట్యూట్ ఆఫ్ టెక్నాలజీ అండ్ మేనేజ్‌మెంట్ ఇంజినీరింగ్ కళాశాల ఏఏసీఈ, సివిసీఎం విభాగాల్లో అసిస్టెంట్ ప్రొఫెసర్లుగా విధులు నిర్వహిస్తున్న జి.విజయకుమార్, వి.యమునలు సంయుక్తంగా రచించిన 'ఆపరేటింగ్ సిస్టమ్స్' అనే పుస్తకాన్ని కళాశాల ప్రిన్సిపాల్ ప్రొఫెసర్ వి.వి.నాగేశ్వరరావు సోమవారం తన కార్యాలయంలో ఆవిష్కరించారు. ఈ సందర్భంగా నాగేశ్వరరావు ఈ పుస్తక ఆవశ్యకతను వివరిస్తూ కంప్యూటర్ సైన్స్, ఆధారిత కోర్సులు చదువుతున్న విద్యార్థులకు ఎంతగానో ఉపయోగ పడుతుందన్నారు. విద్యార్థులకు ఉపయోగపడే మరిన్ని పుస్తకాలను వ్రాయాలని ఆయన ఆకాంక్షించారు. ఈ పుస్తక ఆవిష్కరణలో ప్రిన్సిపాల్ డాక్టర్ ఎ.ఎస్.శ్రీనివాసరావు, అడ్మినిస్ట్రేటివ్ డీన్ డాక్టర్ డి.శ్రీరాములు, హెచ్‌ఓడీలు డాక్టర్ సైదులేషు, డాక్టర్ ఎం.ఎ.జి.వంద్రశేఖర్, అధ్యాపకులు డాక్టర్ టి.మురళీ మోహన్ శర్మలు పాల్గొన్నారు.

పుస్తకావిష్కరణ

చిక్కోలి అదిత్య ఇంజినీరింగ్ కళాశాలలో పుస్తకావిష్కరణ కార్యక్రమం సోమవారం జరిగింది. సీఏసీఈ, సీఏసీఎం విభాగాలకు చెందిన అసిస్టెంట్ ప్రొఫెసర్లు జి.విజయకుమార్, వి.యమున రచించిన 'ఆపరేటింగ్ సిస్టమ్స్' పుస్తకాన్ని కళాశాల ప్రిన్సిపాల్ వి.వి.నాగేశ్వర్ రావు లేదా వీడియో ఆవిష్కరించారు. కంప్యూటర్ సైన్స్‌లో సాంకేతిక కోర్సులు చదువుతున్న విద్యార్థులకు ఈ పుస్తకం ఎంతగానో ఉపయోగపడుతుందన్నారు. కార్యక్రమంలో ప్రిన్సిపాల్ ఎ.ఎస్.శ్రీనివాసరావు, డీన్ జి.శ్రీరాములు, హెచ్ ఓ డీ లు పాల్గొన్నారు. -ఉద్ఘి

23/08/2024 | Srikakulam [Srikakul] | Page : 5
Source : https://epaper.sakshi.com/





Hearty Congratulations to Smt.K.Sangeeta , Co-Ordinator and Dr.T.Naresh Co-cordinator for Successfully organized and completed the One Week NITTR FDP in FogComputing. We are saying thanks to organizers and special thanks to Sri.A.Dasaradha garu for providing delicious lunch for us. 💐💐💐💐💐💐





Our CSM Department Organized Work Shop on "Basics of Intellectual Property Rights and Its Importance for Innovators and Entrepreneurs" and Resource Person Dr.Koppala Venugopal, Associate Dean, R&D .Department of MBA and Organized by Smt.V.Yamuna Assistant Professor CSM,Sri.N Seetaih Assistant Professor, CSM, Smt.K.Sakunthala Assistant Professor, CSM



Our 👆 III CSM-B student K.Krishna Prasad(22A51A4293) certified by EC-Council as a "Certified Ethical Hacker".

Hi All, This is happy to inform you that our III CSM-B student K.Krishna Prasad(22A51A4293) certified by EC-Council as a "Certified Ethical Hacker". on behalf of CSM Department once again we congratulate him 🙌🙌🙌





తెక్కలి, రేపతి ఉదయం, డిసెంబర్ 01 : తెక్కలి ఆదిత్య ఇనిస్టిట్యూట్ ఆఫ్ టెక్నాలజీ అండ్ మేనేజ్మెంట్ ఇంజినీరింగ్ కళాశాలకు చెందిన కంప్యూటర్ సైన్స్ (ఆర్టిఫిషియల్ ఇంటిలిజెన్స్ అండ్ మిషన్ లెర్నింగ్) విభాగానికి చెందిన హెచ్ఓడి డాక్టర్ ఎం.వి.బి.చంద్రశేఖర్, అసిస్టెంట్ ప్రొఫెసర్లు ప్రదీప్ కుమార్ మహాపాత్రో, దశరధ అరంగి, కె.వి.చంద్రశేఖర్లు నూతనంగా ప్రచురించిన 'ఐనగేటింగ్ సిస్టమ్స్' అనే పుస్తకాన్ని కళాశాల డైరెక్టర్ ప్రొఫెసర్ వి.వి.నాగేశ్వరరావు శనివారం తన ఛాంబర్లో ఆవిష్కరించారు. ఈ సందర్భంగా ఆయన పుస్తకంకోసం వినరిస్తూ బ్యాచ్లర్ ఆఫ్ కంప్యూటర్ అప్లికేషన్స్(బిసిఎ), బిటెక్ ఇంజినీరింగ్ విద్యార్థులకు సులభంగా పిలబస్ అర్థమయ్యేలా పుస్తకాన్ని ప్రచారన్నారు. విద్యార్థులకు ఉపయోగ పడే మరిన్ని పుస్తకాలను ముమ్ముందు ప్రచురించాలని దనయిశలను డైరెక్టర్ ప్రొఫెసర్ వి.వి. నాగేశ్వరరావు, ప్రిన్సిపాల్ డాక్టర్ ఎ.ఎస్.శ్రీనివాసరావు, డీన్ ఆర్డీ డాక్టర్ డి.శ్రీరాములు, అధ్యాపక, అధ్యాపకేతర సిబ్బంది అకాంక్షిస్తూ అభినందించారు.





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Letter No. 1166/L/SKCG/2024 Dated: 06 /12/2024

To,
Pradeep Kumar Mahapatro
Assistant Professor
Aditya Institute of Technology & Management
Tekkali, Andhra Pradesh
532201

Subject: Acknowledgment of Guest Lecture on "Enabling smart and connected systems in Cloud Computing"

Dear Sir,

On behalf of S.K.C.G(Autonomous) College, Odisha we extend our sincere gratitude for delivering an insightful guest lecture on **"Enabling smart and connected systems in Cloud Computing"** on 05/12/2024 at Department of Computer Science for M.Sc. First year students. Your expertise and the depth of knowledge shared with the participants were truly inspiring and left a significant impact.

Your session was instrumental in broadening the horizons of our students. The feedback we received was overwhelmingly positive, and your engaging delivery made complex ideas accessible and actionable. We deeply value your willingness to contribute to our learning initiatives and would be honoured to collaborate with you in the future.

Thank you once again for your valuable time and effort. Please feel free to reach out to us if there is any way we can support your work.

PRINCIPAL
S.K.C.G. (Autonomous) College
Paralakhemundi, Gajapati, Odisha

Topic- Enabling smart and connected systems in Cloud Computing by Sri Pradeep Kumar Mahapatro Assistant.Professor Department of CSE(AI&ML) is *given this lecture discussed how Enabling smart and connected systems in cloud computing involves leveraging the scalability, flexibility, and ubiquitous accessibility of cloud resources to integrate and optimize various interconnected devices and services. And also harnessing cloud infrastructure, organizations can enhance data processing capabilities, enable real-time analytics, and foster seamless communication between devices and users. And also students learned how this approach improves operational efficiency but also facilitates innovation in areas such as Internet of Things (IoT), artificial intelligence (AI), and edge computing, thereby driving forward the evolution of smarter, more interconnected digital ecosystems.*



Hi, This is to inform you that our 👆 III CSM student I.Joshi Kumar got best NCC Cadet Medal for the NCC CATC-VI camp 2024, held at our AITAM tekkali. On behalf of CSM Department we congratulate him. 🏵🏵🏵



राष्ट्रीय कैडेट कोर
NATIONAL CADET CORPS

Offg Commanding Officer
14(A) Bn NCC
Srikakulam

प्रमाण - पत्र 'सी'
CERTIFICATE 'C'

सं. No. AP21SDA/262530 | रैंक Rank SGT
नाम Name CHODI SAI KISHORE | सुपुत्र/सुपुत्री Son/Daughter of CHODI SIMMANNA
यूनिट Unit 14(A)BN NCC, SRIKAKULAM | जन्म तिथि Date of Birth 09-12-2003
राष्ट्रीय कैडेट कोर निदेशालय NCC Directorate ANDHRA PRADESH & TELANGANA, SECUNDERABAD
Aditya Institute of Technology & Management, Tekkali

प्रमाणित किया जाता है कि ऊपर लिखित कैडेट ने रक्षा मंत्रलय, भारत सरकार के प्रधिकार के अधीन सन् 20..... में हुई प्रमाणपत्र 'सी' परीक्षा .....श्रेणी में पास कर ली है

This is to certify that the above mentioned Cadet has passed the Certificate 'C' Examination in .....B..... Grade held in 20 ...24... under the authority of ministry of Defence, Government of India.

क्र॰ सं॰ Ser. No. APrC Cert/Army/2024/ 44993
स्थान Place SECUNDERABAD
दिनांक Date 9 DEC 2024

वी एम रेड्डी
V M REDDY
एयर वाइस कमोडोर / Air Cmde
उप महानिदेशक रा.कै.को (आं प्र और से)
Dy Dir Gen NCC (AP&T)
उप- महानिदेशक, राष्ट्रीय कैडेट कोर
Dy. Director General, National Cadet Corps.

Senior Under officer Chodi Sai Kishore
S/O HAV Chodi Simmanna (ARMY)
4th year & CSM Department
Aditya Institute of Technology and Management ,Tekkali

As an NCC cadet , I have successfully completed 7 NCC camps in my three years of NCC Service :

1. **IGC-Republic Day Camp at Secunderabad.**
2. **Lead as Camp Senior Under Officer in Army Attachment Camp at Secunderabad(near 200 cadets with JAKALI Indian Army Regiment).**
3. **Lead as Camp Senior Under Officer in Combined Annual Training Camp at Tekkali (nearly 735 cadets).**
4. **Selected for Local Independence Day camp .**
5. **Remaining 4 camps are Annual Training Camps and CATC Camps held at various locations.**

As an NSS and NCC voluntary , I gave my best service in various activities :

1. **Blood Donation camp conducted by Red Cross Society.**
2. **Swatch Bharat Programme in association with Swatch Bharat and Jal Jeevan Mission , at K.Kotturu village .**
3. **Awareness on Fire safety program in collaboration with Fire department.**
4. **Awareness on Road safety program in collaboration with Transport department**
5. **Rayavalasa temple service at Tekkali.**
6. **International Yoga Day in association with Nehru Yuva Kendra Sanghatan, held at AITAM college.**

Editorial Board

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