ABOUT THE DEPARTMENT

The Department was established in the year 2000 by C&D Educational Trust, it was started with initial strength of 24 students. At present the strength of the department is 273 students in shift I with 8 faculties. Currently the strength of the students has increased. The Department provides innovative teaching for the students.

THE HOD'S MESSAGE

MESSAGE

It gives me a great joy to be the part of the Department of Computer Applications the department is excelling in various activities with great success.

My sincere thanks to the Management, the Secretary Mr.A.N.Henry Maris and the Principal Dr.E.Mary Angeline for their valuable support and guidance. Also, I am also greatly indebted to my colleagues whose sincere dedication, unflagging support and encouragement without which this volume would not have come into its present shape.

Our department has a team of qualified and experienced faculty and staff members and we are striving hard continuously to improve upon the quality of education. We always work with the motto "Nothing can be achieved without genuine effort." The core values of the department help the students to develop their overall personality and make them worthy technocrat to compete at global level. Our department has been conducting seminar / workshop since its beginning to keep the faculty and students abreast of the latest developments in the field of IT education.

We are happy to say that our students have actively participated in various intercollegiate technical meets and have won many prizes to the credit of the department.

I am certain that our students will prove to be an invaluable asset to any organization.

I extend my sincere thanks t the individuals, institutions and industries that have rendered their invaluable support to our college.

Above all, I thank the Lord Almighty for guiding us in all the endeavors.

Dr. M.Thyagaraj

Assistant Professor & Head
Department of Computer Applications

EDITOR'S NOTE

We are glad to launch our newsletter department of computer Applications have been conducted online workshop, webinar and E-quiz many students attended get knowledge in various technical aspects .It gives immense pleasure to release this issue the students achievements involvement and discipline in all

occasion. We extend our sincere thanks to all staff members their support and guidance to release this newsletter.

EDITORS

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MS.N.GAYATRI
MS.J.MARY SANTHA PRIYA
MS.G.BABY SARAL
MS.S.GNANASELVI

ARTICALS

Toward effective knoledge acquisition with first-order logic induction

Knowledge acquisition with machine learning techniques is a fundamental requirement for knowledge discovery from databases and data mining systems. Two techniques in particular — inductive learning and theory revision — have been used toward this end. A method that combines both approaches to effectively acquire theories (regularity) from a set of training examples is presented. Inductive learning is used to acquire new regularity from the training examples; and theory revision is used to improve an initial theory. In addition, a theory preference criterion that is a combination of the MDL-based heuristic and the Laplace estimate has been successfully employed in the selection of the promising theory. The resulting algorithm developed by integrating inductive learning and theory revision and using the criterion has the ability to deal with complex problems, obtaining useful theories in terms of its predictive accuracy.

Dr.M.Thyagaraj
Assistant Professor & Head
Department of Computer Applications

IoT and transparent solar cell based automated green housemonitoring system for tomato plant cultivation

This study aimed to develop and test the feasibility of a smart greenhouse prototype media that is used as a planting medium with an automaticwatering system. The method in this study was Research and Developmentusing the Waterfall model. In order to test the feasibility, the prototype wasvalidated with material expert validators, media expert, and farmers. Thequestionnaire instrument was compiled based on Walker and Hessinstrument. The results of the research found are as follows: the results offeasibility research by media experts has an average score of 4.35 with thecategory "very feasible", assessment by experts the material has an averagescore of 4.4 with the category "very feasible", and the assessment of the userhas an average score of 4.06 with "feasible". The purposed controlled systemof smart greenhouse and as a media for farmers was validated. Our resultsdemonstrated that the smart greenhouse is suitable media to help farmerscultivating the tomatoes plant

Ms. R.Angelin Monica
Assistant Professor
Department of Computer Applications

Web Data Mining Techniques

Web data mining became an easy and important platform for retrieval of useful information. Users prefer World Wide Web more to upload and download data. As increasing growth of data over the internet, it is getting difficult and time consuming for discovering informative knowledge and patterns. Digging knowledgeable and user queried information from unstructured and inconsistent data over the web is not an easy task to perform.

Web data mining is considered as sub approach of data mining that focuses on gathering information from web. Web is a large domain that contains data in various forms i.e.: images, tables, text, videos, etc. As size of web is continuously increasing; it is becoming very challenging task to extract information. In this paper we described three important types of web data mining that can help in finding informative data.

Dr.D.Senthil
Assistant Professor & Head
Department of Computer Applications – Shift II

A Novel Approach to IoT Based Plant Health Monitoring System

Abstract - Plant health management is the science and practice of understanding and overcoming the succession of biotic and abiotic factors that limit plants from achieving their full genetic potential as crops, ornamentals, timber trees, or other uses. Plant monitoring is one of the most important tasks in any agriculture based environment. In this paper, we discuss about the implementation of a plant health monitoring system. Which will check some environment parameters like temperature, humidity and light intensity that has effects on plants. In addition, retrieve the soil moisture. All this information is sent by Arduino Uno dev boards to the Ubidots IoT (Internet of Things) cloud platform. If there are any deviations in the stored sensor value then alert message is sent to the user's smartphone. KeyWords: Arduino Uno dev boards, Ubidots IoT cloud platform, Environmental factors, sensor, IoT, Wi-Fi.

Ms. B.Gomathi

Assistant Professor
Department of Computer Applications

Internet of Things(IoT) Based Multilevel DrunkenDriving Detection and Prevention System UsingRaspberry Pi 3

In this paper, the proposed system hasdemonstrated three ways of detecting alcohol level in the bodyof the car driver and prevent car driver from driving thevehicle by turning off the ignition system. It also sendsmessages to concerned people. In order to detect breathalcohol level MQ-3 sensor is included in this module along witha heartbeat sensor which can detect the heart beat rate ofdriver, facial recognition using webcam & MATLAB and aWi-Fi module to send a message through the TCP/IP App, aRaspberry pi module to turn off the ignition and an alarm asprevention module. If a driver alcohol intake is more than theprescribed range, set by government the ignition will be madeoff provided either his heart beat abnormal or the driver isdrowsy. In both the cases there will be a message sent to theApp and from the App you can send it to family, friend, andwell-wisher or nearest cop for the help. The system isdeveloped considering the fact if driver is drunk and he needsa help, his friend can drive

the car if he is not drunk. Thesafety of both the driver and the surroundings are aimed bythis system and this aids in minimizing death cases by drunkendriving and also burden on the cops

Assistant Professor
Ms. N.GAYATRI

PLANT MONITORING USING IMAGE PROCESSING,RASPBERRY PI & IOT

In India, 70% of its people are in the Agriculture sector. The remaining 30% of people are aninseparable part of this field. Because from agriculture, we get various raw materials and especially crops, which serveas a staple food for people. But The crops and plantations get destroyed mainly due to two major reasons, first reasonis destruction by natural calamities such as flood,earthquake, drought, famine, etc. and second reason is thedestruction by the pathogens.98% of the destruction iscaused by the pathogens and 2% of the destruction happensdue to natural calamities. So the need for the plant diseasedetection was felt. The traditional methods were inaccurateand not effective. So various researches in this field lead toinclusion of image processing for accurate detection ofdisease by using plant leaf. Various spots, patterns on plantleaf are useful in detecting the disease. Furtheradvancement was use of digital image processing for moreaccurate results. On referring various reputed IEEE,international conference and international journal papersregarding this field, it was found that none of these suggestremedy for curing the plant disease

III BCA A
DEEPAK

Automatic Detection of Whitefly Pest using Statistical Feature Extraction and Image Classification Methods

Pest detection in plants and crops is essential for production of good quality food, improved quality of life and astable agricultural economy. Excessive use of pesticides for pest control is harmful to plants, animals as well as humanbeings. Digital image processing along with computer visiontechniques can be applied for early detection of pests and itcan minimize amount of pesticides used in the plants.Generally, leaves are the most affected part of the plants. So,the study of interest is the leaf, rather than whole plant. Among many pests, the white fly is one of the most hazardous pests that affect the leaves. This paper presents an automatedapproach for detection of white fly pest from leaf images ofvarious plants. Initially, image pre-processing techniques suchas noise removal and contrast enhancement are used forimproving the quality of image thus making it suitable for further processing. Then, k-means clustering method is used for segmenting pest from infected leaves. After that, texture features are extracted from those segmented images bystatistical feature extraction methods such as Gray Level RunLength Matrix (GLRLM) and Gray Level Co-occurrence Matrix(GLCM). Finally, various classifiers like Support Vectormachine, Artificial Neural Network, Bayesian classifier, Binarydecision tree classifier and k-Nearest neighbor classifier areused to distinguish between healthy leaf images from white fly pest infected leaf images.

PRABHU
III BCA B

SPORTS ACHIEVMENTS

6/03/2021 & 7/03/2021 - DueBall - B. Prasad

Year	Name of the award/ medal	Team / Individual	University/State/National/ International	Sports/ Cultural	Name of the student
6/3/2020	Second	Team	Inter Collegiate FootBall Tournment	Sports	G. Balayogi
11/3/2021 & 12/3/2021	Second	Team	State Level Tournment - HOCKEY	Sports	M. Meganathan
11/3/2021 & 12/3/2021	Second	Team	State Level Tournment - HOCKEY	Sports	R. Naveen
8/3/2021	First	Individual	University of Madras	Cultural-Junk Art	P. Aishwarya

STUDENTS PARTICIPATION

Date of event/activity (DD-MM-YYYY)	Name of the event/activity	Name of the student participated
19/08/2020	Training	B. Ajith Kumar
27/02/2021	Workshop	
22/04/2021 TO 24/04/2021	Conference	P. Aishwarya
29/05/2021	Cooking	

Computer jokes

1. What does a baby computer call his father?

Data

2. What do you call a computer superhero?

A Screen Saver

3. Why did the computer cross the road?

To get a byte to eat

4. Who chases computer criminals?

A hacker-tracker

5. What do you get if you cross a computer with an elephant?

Lots of Memory

6. What do you get when you cross a dog and a computer?

A machine that has a bark worse than its byte

7. Why was the computer so angry?

Because it had a chip on its shoulder

8. Why did the computer get glasses?

To improve its websight

9. Why did the computer sneeze?

It had a virus

10. Where do computers go to dance?

The disk-o