II Om Shree Manjunathaya Namaha II

MMK & SDM MAHILA MAHAVIDYALAYA

Krishnamurthypuram, Mysore

GI Talk

Girls IT Talk...

Prof. SAINATH MALLIGEMADU
Principal

Mrs. K.S. SUKRUTHA
HOD of Computer Science

Faculty Editors :
Mrs. Rajitha V.
Mrs. Nayana M.P.

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Department of Computer Science
Issue - 23

Student Editors :
Ms. Lakshmi Suchetha, II BCA
Ms. Swathi R., II BCA

From the Principal's Desk

Yet another issue of GI Talk demands some views from the principal's desk. Of course, GI Talk has revealed unique proposition of the department of Computer Science to the readers. In the second half 2018-19 marked a number of activities in the college in general and Computer Science department in particular. The CS department has organized National Seminar on, "Data Science" and it was inaugurated by Hon'ble Vice Chancellor of University of Mysore, Prof. Dr.Hemanth Kumar in the presence of Dr. Yashovarma the Secretary of SDME Society, Ujire. Further, the teachers with their presentations and publications, students with participation and recognitions were the contributors to the growth of their personality they inturn add to the collective contributions to the fame of the college. Ms.Rashmi Hebbar, of the last batch of B.Sc has been awarded with Gold medal, for having secured highest marks in computer science, during the 99th Convocation of the University of Mysore. All other academic and non academic activities of the staff & students have been incorporated in the photo gallery. The readers will definitely see the changes, growth and development. The commitment & involvement of the staff & students are behind this change. However, I cannot deny and reiterate that, this we could do it because of enormous blessings of Poojya Heggadejji, support given by the members of management and Manjunatha Swamy's favour and protection. I am indebted on behalf of every one at SDM MMK.

May Lord Manjunatha Swamy shower his choicest blessings to all.

"**Quality is not an act, it is a habit**" - Aristotle.

Prof. Sainath Malligemadu
Principal

Message by HOD

The 23rd issue Biannual News Letter GI Talk comprising of articles, crossword, quiz related to Information Technology is trying to amplify readers knowledge in the field of Computer Science by focusing light on present day technology and advancements of the same. Students, the young researchers have to consider it, if they want to take it onboard. The world moves on and aspects of technology seem to creep in our day to day life. In this view, this issue paves a path for young blooming techies (students of Computer Science Department) to activate and energies their minds in improving aspects of technology which may lead to innovative studies in the field of Computer Science.

Its my immense pleasure to highlight Ms. Rashmi Hebbar of III B Sc who was awarded with Gold Medal for securing highest mark in all semesters of B Sc Computer Science in the Mysore University Convocation. With the support of Management, Principal, Staff and Students, the BCA Department has obtained 75th position in India Today Ranking 2019. I express my appreciation to the staff and students who have contributed in uplifting the fame of the Department.

I wish the readers and students all the best and am thankful for the cooperation of faculty editors and student editors. Hoping for further more achievements from Staff and Students of the Department.

Smt. K.S. Sukrutha
HOD, Computer Science

Photo Gallery

Smt Ramya S K, attended UGC Sponsored Two Day Workshop on "E-Content Development and Massive Open Online Courses (MOOC)"

Ms. Rashmi Hebbar S of III B Sc(2016-18 Batch) awarded with Gold Medal for securing highest marks in Computer Science during the 99th Convocation held on 17th March 2019.

Ms Lakshmi Suchetha of III BCA was crowned as Miss IT Queen of the academic year 2018-19 during valedictory of Tech Amateur IT Club

34 students of III BCA attended online examination on "Broadband Technology" conducted by Regional Telecom Training Centre (RTTC), Mysuru.

Department of BCA Secured 69th position in India Today Ranking 2018

Students of III B Sc attending Certificate Course on JAVA

Certificate Course on JAVA

Paper presentation by Smt K S Sukrutha & Smt Nayana M P at National Conference held at GSSS Engineering College, Mysuru

BIOINFORMATICS

AIM

The first aim of bioinformatics is to store the biological data organized in form of a database. ...

The second aim is to develop tools and resources that aid in the analysis of data.

OBJECTIVE

Bioinformatics involves the integration of computers, software tools, and databases in an effort to address biological questions. Bioinformatics approaches are often used for major initiatives that generate large data sets. Two important large-scale activities that use bioinformatics are genomics and proteomics.

IMPORTANCE

The importance of bioinformatics lies in the current approach to understanding biological systems which is to integrate multiple sources of data and conduct global analyses of genomics data in order to analyze the genomes and study gene expression profiles from across the species.

RELATION

ADVANTAGES

- Facilitate people to manage their organizations by offering recent reports on studies of a particular area.
- Microarrays are devices designed to analyze simultaneous expression of thousands of genes.
- However, the process will adds noise into the information at each stage of the study. To analyze these thousands of data is necessary to use bioinformatics tools.
- The traditional analysis begins by normalizing data, but the obtained results are highly dependent on how it is conducted .
- Liver tissue taken from an animal model in which is chemically induced cancer is used as an example.

DISADVANTAGES

- These methods are cost-intensive procedures.
- These tests cannot detect unsuspected samples.
- Molecular methods will have difficulty in detecting new pathogens, as the exclusive use of these would overlook such infections.
- The development of dependency syndrome.
- It is costly.

CONCLUSION

Sequence is not going away: next-generation sequencing machines are making more and more sequence and more and more data an increasingly taken-for-granted part of biology. The ways in which this increasingly massive amount of data managed are likely to become ever more entangled with the management of data in other domains, especially with Web-based technology.

Bioinformatics will become just one of many data management problems. This will have consequences not only for biological work, but also - as the results of bioinformatics are deployed in medicine - consequences for our understanding of our bodies. These computational approaches may become so ubiquitous that a 'bioinformatics' - as distinct from other kinds of biology - will disappear as a meaningful term of reference.

Ms. BRUNDA.G - III BCA

PLACE REMINDER- AN ANDROID APP

Abstract

Today the Mobile communication systems play very important role in our day to day life. There is enhancement in data rate and availability of data in mobile communication. Mobile provides the function of reminder depends on date and time. But now day's smart phones provides us various application. One of the applications provided by smart phones is reminder which is based on time. In this paper we introduce a new technology which is depends on Android OS which give the reminder about place that user want to visit. In the first part of this paper there is introduction about the application. In remaining paper will explain the technology.

INTRODUCTION

There is a lot of reminder and alert system in today's mobile phones. But all these reminder system work based on time and date. Sometimes there is desire for reminders based on location. For an example in daily routine we go to mall to purchase listed items n most of the times we forget some of the item to be purchased. We want ourselves to be reminded of the things next time we are at the mall. Every day we use special messages in order to help us remember future tasks. These messages, known as reminders, take many forms, such as post-it notes, emailing one self, to-do lists, and electronic calendar alerts. For example, a student may send himself an email to remind himself to bring a book for class the next day. So proposed application Place Reminder Location Based Reminder on "Mobile Phones "allow user to set reminders based on location in the mobile phones. Once the reminder is set say for grocery store every time when we go to the grocery store the remainder will be displayed on our mobiles. So this application will act as a personal secretary using which we can do our work correctly in the correct place at correct time.

Consider some real world situations:

1. Some people tend to forget things when they go for office or school.
2. A person went to office and thought of doing some work in home when he returns to home.
3. Person may like to purchase a birthday gift the next time when the at gift shop.
4. A person went to the grocery store from home and forgot to bring a list of items which he had written on a piece of paper.
5. When people go on holiday some time they forgot to visit places.

It is desired that there would be a reminder system or application to automatically remind people what they might have forgotten to bring along just when they step at that particular location. The present application is motivated by these situations. Thus our proposed application Place Reminder Location Based Reminder solves all such situations by giving beep/message whenever user reaches location. GPS is key concept in Place Reminder. The Global Positioning System (GPS) is a space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites. We need a GPS receiver enabled Android Mobile phone for receiving the GPS data from the satellite. There are a wide range of such mobiles are available in the market.

GPS

The Global Positioning System (GPS) is a space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the earth. GPS is a complex system which combines three segments - space, control and user segment. Such distinction of segments emphasizes the main objective of the combined segments: to create a functional system that at a global level makes people aware of the possibility and potential of the services based on navigation.

GPS uses the satellite constellation, where each of the satellites transmits the signal in the range which encompasses the message navigation. The latter contains also the information necessary to determine the satellite coordinates and brings the satellite clocks in accordance with the GPS time. At the same time the measurements of at least four satellites are required in order to determine the positioning of three-dimensional and time capacity. The satellite constellation provides a range of possibilities for each user who is located anywhere and anytime on the Earth. Tracking of GPS satellite, using its operative controls and determining their location in space, is performed by the Operational Control Segment (OCS). Additionally, the segment takes care of

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Satellite Communications

The satellite communications market has developed significantly over the past five years. The industry has extended its offerings to include telecommunications services via low Earth orbit (LEO) satellite constellations and enhanced its capabilities in such highgrowth areas as direct-to-home (DTH) television[9]. Despite these expansions, many sectors of the satellite communications industry have experienced mergers among major providers and operators aimed at creating consolidated companies that are more competitive nationally and internationally. New broadband services and bundled offering packages to end-user consumers promise to maintain, or perhaps even increase, recent growth over the next few years. The highest revenue component of the satellite communications industry from 1996 to 2000 has been the satellite services sector. Within this sector, DTH television services have driven a large portion of the growth. The first Direct Broadcast Satellite system, Hughes Communications' DirecTV, debuted in 1994. This DTH satellite television service featured high-powered satellites transmitting in the Ku-band and required consumer reception dishes only 18 inches in diameter, significantly smaller than traditional C-band dishes typically measuring several meters across. As other providers rolled out similar services (Primestar's medium-powered system and Echostar Communications' Dish Network), competition among providers and with the cable industry led U.S. operators to significantly subsidize the cost of consumer equipment to expand their subscriber base.

SOFTWARE TOOLS

I. Android SDK II.IDE:ECLIPSE

III. Database:SQLite IV. PhoneGap

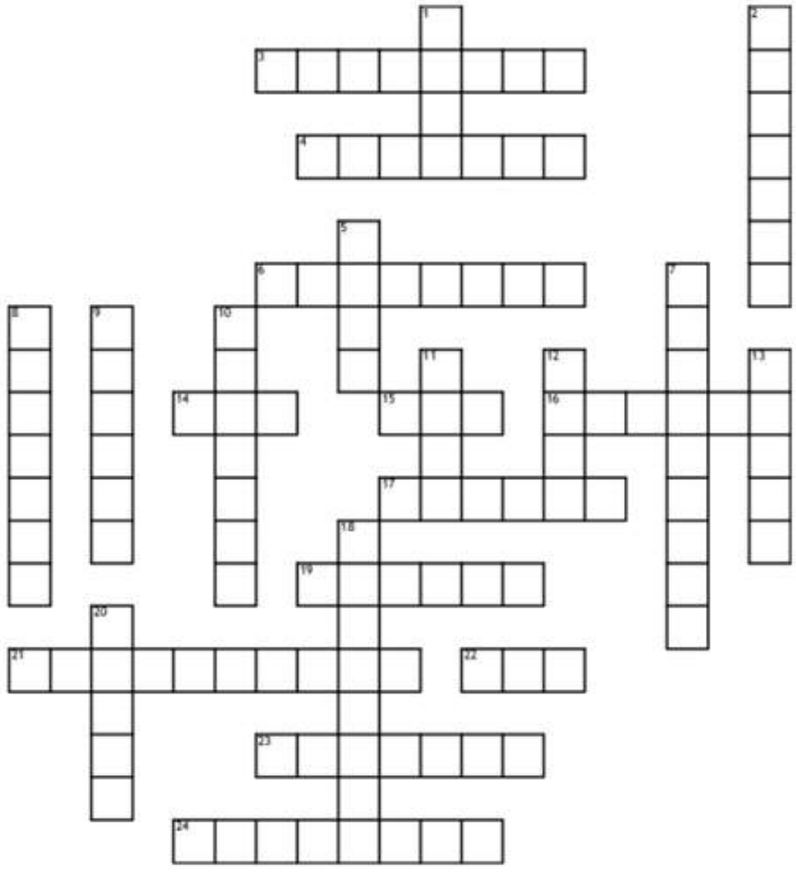
CONCLUSION

The prevalence of mobile phones and the pervasiveness of their networks make them a promising platform for personal ubiquitous computing. Our findings from a two week deployment of Place Reminder validate that location-based reminders can be useful even with coarse location-sensing capabilities. Notably, location was widely used as a cue for other contextual information that can be hard for any system to detect. On the whole, it appears that the convenience and ubiquity of location-sensing provided by mobile phones outweighs some of their current weaknesses as a sensing platform. This bodes well for the use of mobiles phones as a personal ubiquitous computing platform. Our study revealed unexpected uses of location-aware reminders. This is similar to using post-it notes. In highly visible areas for motivation. The locations for motivational reminders were often set at various shops.

Reference : https://www.seminarsonly.com/computer%20science/place-reminder-seminar-report-ppt.php

Ms. ARPITHA N. - III BCA

CROSS WORDS



Across

3. You have me on your computer
4. A communication system consisting of a group of broadcasting stations
6. You use me to type
14. Random-Access-Memory
15. There are 8 of me in a byte
16. You see things from me
17. Computers have a certain amount of me
19. I am used to store stuff
21. I'm a type of disc
22. Read-Only-Memory
23. You can use it to print me
24. You can here things from me

Down

1. You do this with a pencil
2. I'm a type of clock and camera
5. You need 8 bits in me
7.computer circuit consisting of the hardware
8. I rhyme with potter
9. The opposite of input
10. Scans things
11. You store me in a folder
12.interface
13. Opposite of a output
18. You use me to play car games easier (I'm plugged into your computer)
20. I am a cursor

Ms. KAVYA .K.S & Ms. DIVYASHREE.M - II BCA

ANSWERS:
ACROSS: 3.programs 4.network 6.keyboard 14.ram 15.bit 16.screen 17.memory 19.floder 21.floppy disk 22.rom 23.printer 24.speakers
DOWN: 1.draw 2.digital 5.byte 7.interface 8.plotter 9.output 10.scanner 11.file 12.user 13.input 18.joystick 20.mouse

VIRTUAL REALITY

A 2016 virtual-reality headset exclusively for the PlayStation 4 video game console

INTRODUCTION

Virtual reality(VR) is the name of the computer technology that makes a person feel like they are somewhere else. It uses software to produce images, sounds and other sensations to create a different place, so that a user feels like he or she is really part of this other place..

ABOUT THE ARTICLE

Virtual reality generates a simulated environment for users to experience. Current virtual reality technology is implemented through VR headset, which looks like a pair of goggles wrap around user's head and cover their eyes. It generates realistic images and sounds through tracking the movements of user's head using accelerometer and gyroscope in the headset to create the virtual reality experience that user can interact with.

In the field of genetics and genomics, it aids in sequencing and annotating genomes and their observed mutations. It plays a role in the text mining of biological literature and the development of biological and gene ontologies to organize and query biological data. It also plays a role in the analysis of gene and protein expression and regulation.

Technology

The Virtual Reality Modeling Language (VRML), first introduced was intended for the development of "virtual worlds" without dependency on headsets. The Web3D consortium was subsequently founded in for the development of industry standards for web-based 3D graphics.

All modern VR displays are based on technology developed for smartphones including: gyroscopes and motion sensors for tracking head, hand, and body positions; small HD screens for stereoscopic displays; and small, lightweight and fast processors.

Independent production of VR images and video has increased by the development of omnidirectional cameras, also known as 360-degree cameras or VR cameras, that have the ability to record in all directions, although at low-resolutions or in highly compressed formats for online streaming of 360 video.

APPLICATIONS

VR is most commonly used in entertainment applications such as gaming and 3D cinema.. Beginning in the 2010s, next-generation commercial tethered headsets were released by Oculus (Rift), HTC (Vive) and Sony (PlayStation VR), setting off a new wave of application development.

3D cinema has been used for sporting events, pornography, fine art, music videos and short films. Since 2015, virtual reality has been installed onto a number of roller coasters and theme parks.

In robotics, virtual reality has been used to control robots in telepresence and telerobotic systems. The technology is useful in robotics development such as in experiments that investigate how robots through virtual articulations can be applied as an intuitive human interface

In social sciences and psychology, virtual reality offers a cost-effective tool to study and replicate interactions in a controlled environment. It can be used as a form of therapeutic intervention.

CONCLUSION

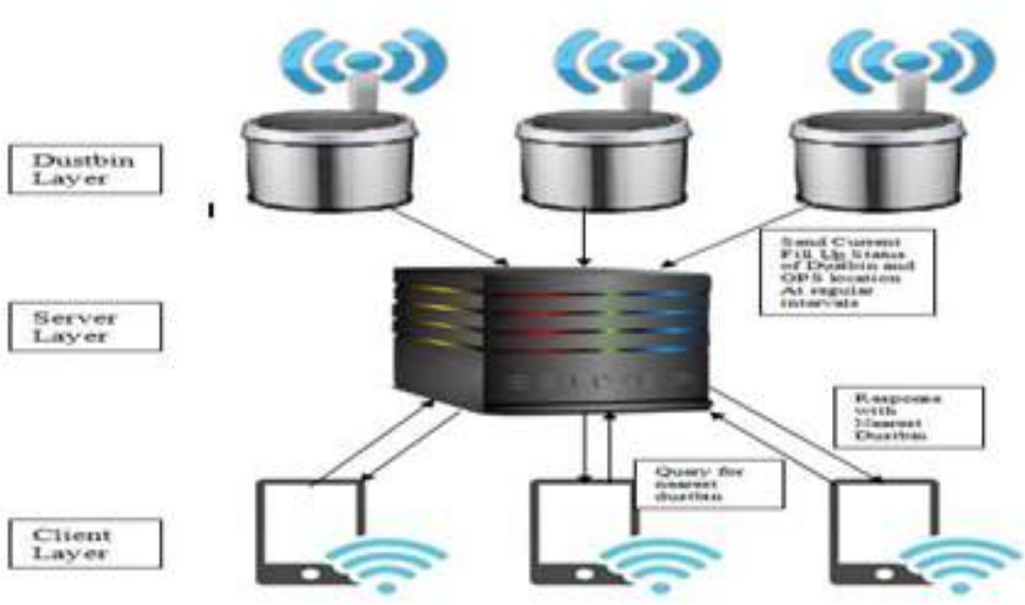
Virtual reality's growing market presents an opportunity and an alternative channel for digital marketing.It is also seen as a new platform for e-commerce, particularly in the bid to challenge traditional brick and mortar retailers. A study revealed that the majority of goods are still purchased in physical stores.

For this reason, the simulated store environment made possible by VR technology has the potential to attract more consumers since it offers an almost similar experience in the physical store without the inconvenience of being there.

Ms. VYSHNAVI M.S. - III BCA

SOURCE: Google
https://wikipedia.org/wiki/Virtual_reality

SMART DUSTBINS FOR SMART CITIES



Abstract

The govt. of India has recently launched a smart city project and for these smart cities to be smarter it is necessary that the garbage collection system has to be smarter and in addition to that the people need easy accessibility to the garbage disposing points and garbage collection process has to be efficient in terms of time and fuel cost.

INTRODUCTION

Most of the urban cities and town in India are not well designed to facilitate the proper garbage disposing and collection mechanism. Also the cities are expanding rapidly putting the pressure on existing infrastructure which is not expanding at the same pace that of urbanization .As the govt. of India has launched smart city project to utilize the IT enabled solution so there is an implicit need to make the city cleaner. Our proposed system provide an IT based solution to garbage collection providing greater accessibility, planning appropriately for disposing process and at the same time enabling collection of garbage generation data. Our proposed system solves three related problems:-

1) Greater access to the garbage disposing points (public dustbin)
2) Efficient in terms of time and fuel cost.
3) Provide data collection facility on how much a city generates garbage and accordingly plan disposing process.

DESCRIPTION

This proposed system has been divided into three layers:

1) Dustbin Layer

This layer consists of internet and Wi-Fi enabled dustbins. Every dustbin contains a sensor which senses the fill up status of dustbin and sends the data to the server. It also sends it current GPS location to the server at regular intervals.

2) Server layer

Server collects the fill up status and location of dustbins. It processes the clients query and it respond with nearest dustbin location and with direction to access dustbin.

3) Client layer

Clients request for the nearest location of the IT enabled dustbin to the server using Mobile App designed for this purpose

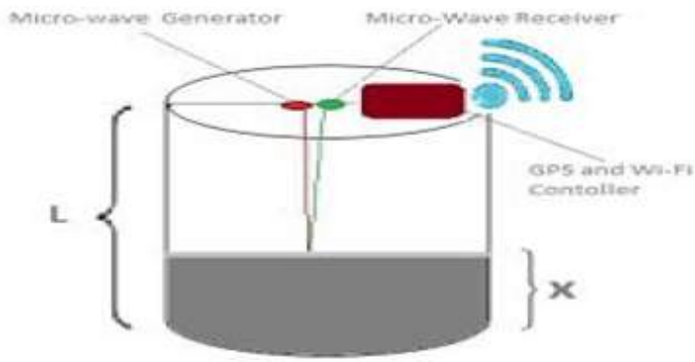


Fig.2 shows the Working principle of dustbin

WORKING PRINCIPLE OF A SMART DUSTBIN

X is current fill up status, T is time duration between generation of wave and wave received by receiver and C is the speed of light. And we will calculate the value of X using formula given below

X=L-(CT)/2

And similarly percentage of fill up is calculated using formula given below

P=(X/L)*100

Where P is the % fill up Here we are assuming the wave path is almost vertical..

IMPLEMENTATION

Now the question arises how we collect the garbage optimally from these dustbins for this purpose we can use following three scheduling Algorithm.

1) Fixed Scheduling

In this scheduling collection process carried out after fixed interval for example collect after every three days. Here we can use the Traveling salesman problem algorithm for route planning.

2) Priority Scheduling

In this scheduling the dustbins are collected according to the decreasing current fill up status. For example if we have 3 dustbins with fill up status 92%, 80% and 96%. Then collect in this order 96%, 92% and then 80%

3) Average Threshold Scheduling

In this scheduling we first find out the average of all fill up status of all dustbins. Then if average is greater than some threshold like 70% then schedule the collection process and within that scheduling collect according to the Priority scheduling or Traveling salesman problem.

4) Full Dustbin Capacity Utilization Scheduling

In this scheduling we will carry the collection process only when all the dustbins are completely filled up. Here we can again use the traveling salesman problem algorithm for route planning.

ADVANTAGES

1. Our system provides greater accessibility to the dustbin.
2. In our system if dustbin is relocated to another location it will automatically registered with the server with the new GPS location.
3. It will save fuel and time using appropriate route planning. Here we can use traveling salesman problem for route planning.
4. It will generate less pollution as we are saving fuel here which is mostly diesel and petrol.
5. We can plan and design the collection process as here we can estimate the current garbage disposing levels on monthly basis using the data provided by IT enabled dustbin.

CONCLUSION:

One of the utility of our system is that the Govt. can use the garbage generations statistics for policy and program design. If the system is implemented properly it will really make the cities cleaner and greener and makes the smart city a reality.

Reference : https://www.seminarsonly.com/computer%20science/smart-dustbins-seminar-report-ppt.php

Ms. ARPITHA N. - III BCA

MACHINE LEARNING

Introduction

Machine learning is an idea to learn from examples and experience, without being explicitly programmed. Instead f writing code,you feed data to the generic algorithm, and it builds logic on the given data.

For example, one kind of algorithm is a classification algorithm used to detect handwritten alphabets could also be used to classify emails into spam and not-spam.

Description

Machine learning is a subfield of artificial intelligence (AI). The goal of machine learning generally is to understand the structure of data and fit that data into models that can be understood and utilized by people.

Machine Learning Methods

In machine learning, tasks are generally classified into broad categories. These categories are based on how learning is received or how feedback on the learning is given to the system developed.

Supervised Learning

In supervised learning, the computer is provided with example inputs that are labeled with their desired outputs. The purpose of this method is for the algorithm to be able to "learn" by comparing its actual output with the "taught" outputs to find errors, and modify the model accordingly. Supervised learning therefore uses patterns to predict label values on additional unlabeled data.

For example, with supervised learning, an algorithm may be fed data with images of sharks labeled as fish and images of oceans labeled as water. By being trained on this data, the supervised learning algorithm should be able to later identify unlabeled shark images as fish and unlabeled ocean images as water.

A common use case of supervised learning is to use historical data to predict statistically likely future events. It may use historical stock market information to anticipate upcoming fluctuations, or be employed to filter out spam emails. In supervised learning, tagged photos of dogs can be used as input data to classify untagged photos of dogs.

Unsupervised Learning

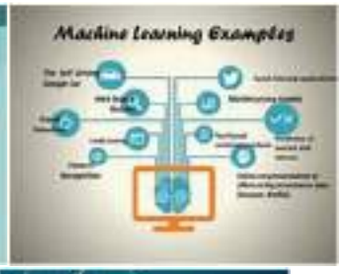
In unsupervised learning, data is unlabeled, so the learning algorithm is left to find commonalities among its input data. As unlabeled data are more abundant than labeled data, machine learning methods that facilitate unsupervised learning are particularly valuable.

The goal of unsupervised learning may be as straightforward as discovering hidden patterns within a dataset, but it may also have a goal of feature learning, which allows the computational machine to automatically discover the representations that are needed to classify raw data.

Applications of machine learning

- Agriculture
- Adaptive websites
- Affective computing
- Bioinformatics
- Brain-machine interface
- Computer networks
- Data quality

Images



Conclusion

Machine learning approaches applied in systematic reviews of complex research fields such as quality improvement may assist in the title and abstract inclusion screening process. Machine learning approaches are of particular interest considering steadily increasing search outputs and accessibility of the existing evidence is a particular challenge of the research field quality improvement. Increased reviewer agreement appeared to be associated with improved predictive performance.

Ms. Kusuma K. - II BCA

MOBILE ROBOT

Mobile Robots are the objects which move around their environment and are not fixed to one physical location. They consist of instrument panels like laser scanners, monocular cameras and RFID devices, for sensing the terrain. They can be controlled by Bluetooth, wireless network of PC, a wireless remote controls microcontroller etc. They are used for reasons like security, maintenance industrial transports in military etc. Mobile Robots are the focus of a great deal of current research. Mobile Robots are also found in industries, military and security environments. They also appear as consumer products, for entertainment or to perform certain tasks.

Mobile Robots have the capability to move around in their environment and are not fixed to one physical location. Mobile Robot can be "Autonomous" (AMR autonomous mobile robot) which means they are capable of navigating an uncontrolled environment without the need for physical or electro mechanical guidance devices. Alternatively, Mobile Robot can rely on guidance devices in relatively controlled space (AGV autonomous guided vehicle) by contrast, industrial Robots are usually more or less stationary consisting of a jointed arm (multi linked manipulator) and gripper assembly, attached to a fixed surface.

Mobile Robots have become more common place in commercial and industrial settings. Hospitals have been using autonomous mobile Robot to move materials for many years. Warehouses have installed mobile Robotic system to efficiently move materials from stocking shelves to order fulfillment zones. Mobile Robot are also a major focus of current research and almost every major university has one or more labs that focus on Mobile Robot research, Mobile Robots are also found in industrial, military and security setting. Domestic Robots are consumer products, including entertainment Robots and those that perform certain household tasks such as vacuuming or gardening. The components of a mobile Robot are a controller, control software, sensors and actuators. The controller is generally a microprocessor, embedded microcontroller or a personal computer. Mobile Robot control software can be either assembly level language or high level language such as C, C++, Pascal, Fortran or special real time software.

ADVANTAGES

Mobile Robot can go down into the unknown places where the humans would be crushed, they can give us the information that the humans can't get they can work at placed 24/7 without any salary and food.

The mobile Robot can perform the task faster than the humans and much more consistently and accurately, they become more common each and every day.

The Mobile Robot are use produce the products in factories such as assembling the cars.

Mobile Robots are use to built the parts for many products such as the plane parts, the car parts and the construction supplies.

The Mobile Robot do not require to sleep or take breaks, they are able to function without stopping, when employed to carry out dangerous task, the risk to human health and safety is reduced.

The Mobile Robot are designed to work in harash environments like a space, without the air, under water and in the fire.

They can be used to overcome the limitations that humans have.

DISADVANTAGES

Mobile Robot need a power supply.

The people can lose jobs in factories.

They need the maintenance to keep them running.

It costs a lot of money to make or buy the Mobile Robot.

The Mobile Robot can store large amount of data but the storage, access is not as effective as the human brain.

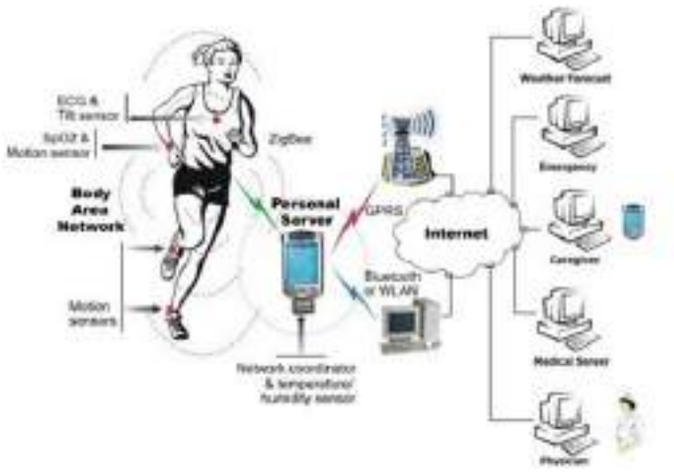
They can perform the repetitive tasks for a long time but they do not get better with experience such as the humans do.

CONCLUSION

This control is performed using magnetic field and Lorenz force. The locomotion of the inner robot, even when it carries a heavy payload, can be accomplished through the thin panel by utilizing and energy accumulation strategy.

Ms. VINUTHA D. - I BCA

WIRELESS BODY AREA NETWORK(WBAN)



A WBAN (wireless body area network) or a BAN (body area network) is a wireless network of the wearable computing device. These devices may be placed in the human body or surface mounted on the human body in a particular position. The growth of attention in wearable technologies such as glasses, watches has meant an improved focus on wireless networking. The term BAN (body area networks) have been invented to refer to the wireless network technology used in combination with wearables. The main purpose of these networks is to transmit data produced by wearable devices at outside to a WLAN or the Internet. In some cases, wearables can also exchange the data directly with each other. A WBAN system can use WPAN wireless technologies as gateways to reach longer ranges. Through gateway devices, it is possible to connect the wearable devices on the human body to the internet. This way, medical professionals can access patient data online using the internet independent of the patient location.

Applications

Initial applications of BANs are expected to appear primarily in the healthcare domain, especially for continuous monitoring and logging vital parameters of patients suffering from chronic diseases such as diabetes, asthma and heart attacks.

Other applications of this technology include sports, military, or security. Extending the technology to new areas could also assist communication by seamless exchanges of information between individuals, or between individual and machines.

Components

A typical BAN requires vital sign monitoring sensors, motion detectors (through accelerometers) to help identify the location of the monitored individual and some form of communication, to transmit vital sign and motion readings to medical practitioners or care givers. A typical body area network kit will consist of sensors, a Processor, a transceiver and a battery. Physiological sensors, such as ECG and SpO2 sensors, have been developed. Other sensors such as a blood pressure sensor, EEG sensor and a PDA for BSN interface are under development.

Challenges of WBAN

WBAN has also faced various challenges in the competition of various technologies. The different challenges of WBAN include

The different sensor devices are used in the formation of the WBAN and the construction of complex nature sand is very difficult.

Many people think that this WBAN technology is not safe in the field of hospitality as equated to other medical devices.

When the WBAN's are used for the data transmission they are not beneficial and can intrude the transmission of data & decrease the efficiency.

Ms. LAVANYA C. - II BCA

Staff Achievements

- Smt Ramya S K, attended **UGC Sponsored Two Day Workshop on E-Content Development and Massive Open Online Courses(MOOC)** at Human Resource Development Center, Manasagangothri, University of Mysore, Mysuru on 6th and 7th March 2019.
- Mrs Sukrutha K S & Mrs Nayana M P attended and presented a paper entitled "Advancement in Emotion Based Control Using Blue Eyes Technology" at the One Day National Conference on Communication and Data Science(NCCDS-2019) organized by GSSS Institute of Engineering and Technology for Women in association with IETE and publication partners BJIT- Springer & IJCA on 26th April 2019 .
- A paper entitled "**Hybrid Approaches to Person Verification Using Fingerprint"** was published in **Journal of Emerging Technologies and Innovative Research**(JETIR) (ISSN: 2349-5162) UGC Approved & 5.87 Impact Factor Published in volume 6 Issue 4, April 2019 by Mrs Sukrutha K S & Mrs Rajitha V .
- Mrs Sukrutha K S & Mrs Nayana M P appointed as BOE Member of Computer Science Board, University of Mysore.

- Smt Ramya S K, attended **UGC Sponsored Two Day Workshop on E-Content Development and Massive Open Online Courses(MOOC)** at Human Resource Development Center, Manasagangothri, University of Mysore, Mysuru on 6th and 7th March 2019.
- Mrs Sukrutha K S & Mrs Nayana M P attended and presented a paper entitled "Advancement in Emotion Based Control Using Blue Eyes Technology" at the One Day National Conference on Communication and Data Science(NCCDS-2019) organized by GSSS Institute of Engineering and Technology for Women in association with IETE and publication partners BJIT- Springer & IJCA on 26th April 2019 .
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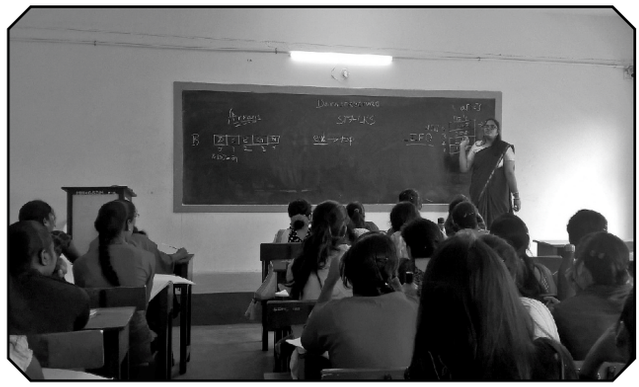
Student Achievements

- Ms. Kusuma K and Ms Ashwini B N of II BCA Participated in **IT Quiz Competition** held at Maharaja Institute of Technology, Mysore On 23rd January 2019.
- Ms. Pavithra B Kowshik of III BCA participated in two day workshop on **"Android App Development"** at **Disciple India Group, Bangalore** on 19th and 20th January 2019 organized by Azure Skynet Soutions Pvt. Ltd. In association with ELAN & NVISION-IIT Hyderabad.
- Ms Monisha M.L and Ms Meenakshi P M of III BCA completed 3 months free **internship** program at Dot Angle, Kuvempunagar, Mysuru.
- Ms. Kavya Urs and Ms. Bharani of I BCA participated intercollegiate Competitions held at NIE Science college, Mysore and exhibited Science Model "Dancing Fire based on Bernouli's Principle" on 28th February 2019.
- Ms. Divija II BCA participated intercollegiate Competitions held at NIE Science college, Mysore and took part in Power Point Presentation Competition on the theme "Artificial Intelligence in Computer Technology" on 28th February 2019.
- Ms. Rashmi Hebbar S, III B Sc(2016-18 Batch) awarded with **Gold Medal** sponsored by Mysore University Computer Science Alumni Association for securing highest marks in Computer Science during the **99th Convocation** held on 17th March 2019.

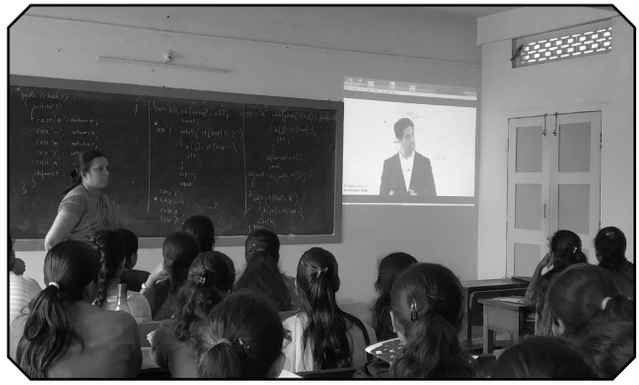
Photo Gallery

Student Faculty Programme by Divyashree M S of III B.Sc
on the topic "Searching Techniques - Quick Sort" to I B.Sc students



Student Faculty Programme by Divija K of II BCA on the topic
"Implementation of Stack" to I BCA students

Student Faculty Programme by Lakshmi Suchetha of III BCA
on the topic "Color Raster Scan System" to II BCA students



TED Lecture Programme on "How to develop Communication & Interpersonal
Skills" and "Leadership Qualities" to I B Sc students

TED Lecture Programme on "Map of Computer Science"
to I BCA students

Interclass Web Page Designing Competition
organized by Tech Amateur IT Club

Alumni Faculty Programme by Ms. Priyanka M, Asst. Prof. of Computer Science, SBRR Mahajana
First Grade College, Mysore from 2006 - 2009 batch on "Numerical Analysis" to III B Sc students

Interclass Coding Competition "Code War"
organized by Tech Amateur IT Club

Photo Gallery

TED Lecture Programme on "Sixth Sense Technology" by Pranav Mistry to II BCA students

Trip to Dharmastala and Mangalore by IIIBCA Students

National Seminar on "Data Science" organized by Department of Computer Science

Prof. Dr.P S Hiremath, Dept. of Computer Science (MCA), KLE Technological University, BVBCET, Hubli, released 22nd Issue of GI Talk

Visit to Regional Telecom Training Centre (RTTC), T K Layout, Mysore by II BCA students

III BCA students attended a weeklong training program on "Broadband Technology" at Regional Telecom Training Centre (RTTC), T K Layout, Mysore

Ms. Kavya Urs and Ms Bharani of I BCA exhibiting a Model "Dancing Fire based on Bernouli's Principle" on National Science Day.

Display cum Competition of Wall Magazines organized by IT club

CONGRATULATIONS TO ALL THE TOPPERS WHO HAVE SECURED HIGHEST MARKS IN THE UNIVERSITY EXAMINATIONS HELD DURING NOVEMBER/DECEMBER 2018

Chaitra Hegde
558/600 V - BCA

Yogitha N.
548/600 - V BCA

Chaitra S.
537/600 - V BCA

Ambika N.
521/600 -III BCA

Roja K.A.
515/600 - III BCA

Sushmitha Somanna
513/600 - III BCA

Nagapriya
259/300 - I B.C.A.

Sindhu G.
259/300 - I B.C.A.

Sunitha M.
248/300 - I B.C.A.

Sreeraksha Hegde
246/300 - I B.C.A.

Manasa D.
275/300 - V B.Sc.

Rekha S.
268/300 - V B.Sc.

Rashmi Urs
265/300 - V B.Sc.

Bushra Zahar
98/100 - III B.Sc.

Sowmya M.N.
93/100 - III B.Sc.

Archana R.
89/100 - III B.Sc.

Roopali Sharma
98/100 - I B.Sc.

Adithi Aaul
82/100 - I B.Sc.

Chaitanya
81/100 - I B.Sc.

Editorial Team

Smt Rajitha V.
Asst. Professor of
Computer Science

Smt Nayana M.P.
Asst. Professor of
Computer Science

Miss Lakshmi Suchetha
Student Editor

Miss Swathi R.
Student Editor