॥ Om Shree Manjunathaya Namaha ॥

MMK & SDM MAHILA MAHAVIDYALAYA

Krishnamurthypuram, Mysore

GI Talk
Girls IT Talk…

Prof. SAINATH MALLIGEMADU
Principal

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From the Principal's Desk

From the Principal's desk…I am really happy to write imperceptible achievementsof the college and activities of the Computer Science Department from the Principal's desk in the 22nd edition of GI Talk. The introduction of the CBCS system by the university has increased the responsibility of the staff and students in balancing academics and non-academics activities of the college. However, maintaining and furthering the quality based education to the stake holders of society is the primary objective. In this process, the institution has been striving to attain all round excellence and to impart quality education along with ethical and cultural awareness to students of all strata of society with the blessing of Poojya Dr D Veerendra Heggade. We are pleased to inform you that BCA Department of our college has secured 69th and BBA Department in the 78th position in India Today Ranking 2018. The Silicon India Magazine, in its special survey, listed our college as 'top 10 promising Educational institute in Karnataka-2018'. As on this date, 114 students have been placed by different MNCs like Infosys, TCS, NICE and Wipro.

The tremendous efforts put by the staff and the students, in keeping the tempo have to be recorded and congratulated. The contributions and achievements by the students and staff on various topics of recent developments in the field of computer science have been placed on record in this GI Talk. The photo gallery includes the activities, alumni visits, exuberant performance of the staff members in Seminars, workshops and the recent visit of our Hon'ble President Poojya Dr D Veerendra Heggadeji to our college. Smt. K S Sukrutha, Head of the Department and her colleagues are doing best to contribute for the development of the college. Sincerely appreciate their efforts. We strongly believe that, above recorded success story could be possible largely because of the faith and blessings of Pooya Heggadeji and constant support given by the members of Management. I am indebted on behalf of everyone at SDM MMK.

May the blessing of Lord Manjunatha Swamy be bestowed on all.
"Excellence is an art won by training and habituation." ? Aristotle

Prof. Sainath Malligemadu
Principal

Message by HOD

I welcome the readers to the 22nd issue of bi annual News Letter GI Talk. Here the reader will find the latest articles related to technology, news about the department and its exceptional programs.

I am pleased to inform you that the College has adopted the Choice Based Credit System (CBCS) scheme prescribed by the University of Mysore from this academic year. The Syllabi has the cutting edge elements in the curriculum, including essential entrepreneurial skills and this will raise the quality of the outgoing graduates.

The department ensures in imparting quality education through various curricular and co-curricular based programmes which improves both technical and entrepreneurial skills among students which is needed to thrive in the present competitive world. Quality in education is the benchmark of our Management. Hence, our Management encourages the College to participate in various Rankings such as National Institute Ranking Framework (NIRF) , India Today and NAAC etc., to enable the College to get recognition Nationwide which benefits all the stakeholders of the College. I profusely thank our Management and Principal Prof . Sainath Malligemadu for their constant support and guidance in conducting all the events of the Department.

I compliment the staff and student editors who took keen interest in bringing out this issue of News Letter successfully. We look forward to keeping you posted on our progress and remarkable accomplishments of our students and faculty.

Smt. K.S. Sukrutha
HOD, Computer Science

Photo Gallery

Recent visit to College by Poojya Dr D Veerendra Heggade

Miss Bindu Raj .L Pursuing MCA at Amritha Vidya Peeta, Mysuru, Alumnus from 2015-18 batch gave a Lecture on the topic Colour Image for III BCA students on 14th July 2018 as part of Alumni Faculty Programme.

Miss. Priya K P, Assistant Professor of Computer Science, St. Joseph College, Mysuru and Gold Midlist, 2012-15 batch from BCA, gave a Lecture on the topic Computer Architecture for I BCA students on 25th July 2018 as part of Alumni Faculty Programme.

Elections for the Office Bearers of Tech Amateur IT Club was held on 12th July 2018 and newly elected office bearers along with staff members are seen in the picture.

Smt K.S. Sukrutha, HOD of the Department giving orientation to the newly admitted students of I BCA class on 28th June 2018.

Inauguration of Wall Magazine Tech World by Prof. Sainath Malligemadu on 26th July 2018.

Inauguration of Tech Amateur IT Club by Mr Umesh S, Principal, Education Training & Assessment, Infosys India Limited, Mysuru on 27th July 2018

Release of 21st issue of GI Talk Bi-Annual News Letter by Principal Prof. Sainath Malligemadu on 27th July 2018

What is palm vein authentication?

"contactless biometrics"
Palm vein authentication

INTRODUCTION

vein authentication uses image recognition and optical technology to scan the normally invisible vein pattern of the palm, back of the hand, fingers, etc. It has the properties of being highly accurate and highly resistant to counterfeiting, impersonation, and other dishonest actions.

From security systems for the average family home to protection of personal information, anti-theft devices for cars and other vehicles, and world-wide anti-terrorist systems, relatively safe, low-risk security systems are being sought in a large variety of fields.

The world first "contactless vein authentication" technology developed by Fujitsu offers even more security and ease of use while overcoming previous problems.

DESCRIPTION

Palm vein authentication technology uses near infrared light to capture an image of the patterns of the veins that are hidden underneath the physical skin of user's palm.

Because of this near infrared light,users are not required to get in physical contact with the sensor of the scanning device.

Some scanning devices are capable of handling finger vein authentication, fingerprint authentication,palm vein authentication,iris authentication from within a single scanning unit.

ADVANTAGES

Very economical

Highest factor of security

Hidden characteristics are used as biometric features

One time registry and usage throughout life

Cheap to produce, easy to install

DISADVANTAGES

Factors like temperature, focus, humidity, nearness of vein to surface affects the quality of captured image

It is relatively expensive

Invasive because it creates fear among users that it can be painful process.

APPLICATIONS

ATM's

Personal computers and laptops

passports

banks

libraries

hospitals

home appliances

laboratories where high security is maintained

YOGITA N., III BCA

Source : slideshare,quora.com,linkedIN

PROJECTION KEYBOARD

INTRODUCTION

A projection keyboard is a form of computer input device whereby the image of a virtual keyboard is projected onto a surface: when a user touches the surface covered by an image of a key, the device records the corresponding keystroke. Some connect to Bluetooth devices, including many of the latest smartphone, tablet, and mini-PC devices with Android, iOS or Windows platform.

An optical virtual keyboard was invented and patented by IBM engineers in 1992. It optically detects and analyses human hand and finger motions and interprets them as operations on a physically non-existent input device like a surface with painted or projected keys. In that way it can emulate unlimited types of manually operated input devices (such as a mouse, keyboard, and other devices). Mechanical input units can be replaced by such virtual devices, potentially optimized for a specific application and for the user's physiology, maintaining speed, simplicity and unambiguity of manual data input.

In 2002, start-up company Canesta developed a projection keyboard using their proprietary "electronic perception technology." The company subsequently licensed the technology to Celluon of Korea.

A proposed system called the P-ISM combines the technology with a small video projector to create a portable computer the size of a fountain pen.

Design:

A laser or beamer projects visible virtual keyboard onto level surface. A sensor or camera in the projector picks up finger movements Software converts the coordinates to identify actions or characters.

Some devices project a second (invisible infrared) beam above the virtual keyboard. The user's finger makes a keystroke on the virtual keyboard. This breaks the infrared beam and reflects light back to the projector. The reflected beam passes through an infrared filter to the camera. The camera photographs the angle of incoming infrared light. The sensor chip determines where infrared beam was broken. Software determines the action or character to be generated.

The projection is realized in four main steps and via three modules: projection module, sensor module and illumination module. The main devices and technologies used to project the image are a diffractive optical element, red laser diode, CMOS sensor chip and an infrared (IR) laser diode.

DESCRIPTION

Template projection:

A template produced by a specially designed and highly efficient projection element with a red diode laser is projected onto the adjacent interface surface.The template is not however involved in the detection process.

Reference plane illumination

An infra-red plane of light is generated on the interface surface. The plane is however situated just above and parallel to the surface. The light is

invisible to the user and hovers a few millimeters above the surface. When a key position is touched on the surface interface, the light is reflected from the infra-red plane in the vicinity of the key and directed towards the sensor module.

Most projection keyboards use a red diode laser as a light source and may project a full size QWERTY keyboard. The projected keyboard size is usually 295 mm x 95 mm and it is projected at a distance of 60 mm from the virtual keyboard unit. The projection keyboard detects up to 400 characters per minute.

Connectivity

Projection keyboards connect to the computer either through Bluetooth or USB.

Bluetooth dongle technology enables the projection keyboard for point to multi-point connectivity with other Bluetooth devices, such as PCs, PDAs and mobile phone.

The way that Bluetooth projection keyboards connect to devices depends on the specific tablet, phone or computer.

Alternative uses

Apart from simply being used to type, some laser keyboard systems can function as a virtual mouse or even as a virtual piano, such as the crowd-funded iKeybo.

Advantages of virtual laser keyboard

The virtual laser keyboard is great for your PDA or other mobile device. Essentially, aside from the cool factor, if the keyboard on your device is smaller than you care for then the Virtual Laser Keyboard is a good choice if you travel a lot. If not, you will be better off with a larger standard Bluetooth keyboard.

The Virtual Laser Keyboard uses a fixed image… i.e., the projected image never changes. It uses an IR detector to sense your hand movements. The usability of the keyboard entirely depends on the surface on which it is placed. It works best on smooth, flat, dull surfaces such as a wooden table. Shiny surfaces such as glass or marble tend to not work as well, if at all.

If you are a fast typer you will definitely notice a reduction in typing speed when using the Laser Keyboard. It does take some getting used to, but does work when used with the right typing surface.

Disadvantages of virtual laser keyboard

Virtual keyboards are becoming more prevalent with the growth of smartphones, tablets, and touchscreen laptops and desktops. While offering many benefits, virtual keyboards do pose some disadvantages compared to physical keyboards. Your typing speed and accuracy may be affected, the screens have a tendency to get fingerprint smudges and dirt, and ergonomic issues can be a problem based on how you use it.

CONCLUSION

Virtual keyboard uses sensor technology and artificial intelligence to let users work on any surface as if it were a keyboard. Projection keyboards or virtual keyboards claim to provide the convenience of compactness with the advantages of a full-blown QWERTY keyboard. Virtual keyboard is designed for anyone who is trying to put information into a handheld but doesn't want to carry a notebook computer around.

Thus virtual keyboards will make typing easier, faster and almost a pleasure.

HARSHITHA. D.B
II B.Sc

SOURCES:
https://en.m.wikipedia.org/wiki/Projection_keyboard
https://answers.yahoo.com/question/index?qid

Why we Desperately Need Better Cyber Security

The Internet of Things is an idea of potentially unending consequence and infinite possibility.

Essentially, it is the drive to make every device in our everyday lives communicates with other devices over the internet. It would mean that your entire house can be controlled with your phone and, one day hopefully, your entire life. Everything from your car to your refrigerator will be able to communicate, not only with your phone but other devices and servers all over the world.

New problems are presented by the Internet of Things

The potential of the Internet of Things, as you might assume, is positively staggering as an entirely interconnected world would mean unprecedented access to data that can be used to shape the future. It is a goal towards uniform access to the internet and the ability to communicate with other people all over the world.

To create a world above the physical, to make an internet without borders. It is the dream and fascination of many tech entrepreneurs and tech writers as we see the day of complete internet coverage draw near.

In this time, however, we must consider every eventuality and potentiality if such actualization were to occur.

This is a truly ailing problem as the threat of hacking becomes much greater given the sheer number of access points that are being created in pursuit of the Internet of Things. In this article, we are going to examine the multiple reasons why we need better cybersecurity in the incoming Internet of Things.

A massive network and the law of averages

By the sheer principle of technological evolution, the number of access points that are being created is going to be a real problem for users around the world and a real joy to hackers everywhere. As major tech companies push for greater access, devices must be made and acquired for potential internet users to access the internet.

There is no shortage there, however, as the number of smart phones, and companies making them, seem to increase almost daily. It is no small feat to manufacture a nation's weight in phones, but our major mobile companies are doing it with ease.

The problem lies in the fact that every Smartphone is a potential access point for any malicious actor to exploit. The law of averages alone dictates as the overall number of devices increases so will the number of hackers. This isn't including all of the laptops and tablets that are already out there being used with malicious intent.

Security is all about approach

It is an impossible feat to require all smart phones to be encrypted, but, if anything, this means that it is even more important for us to implement cyber security on all our devices. If you are not, then you may very well fall victim to one of the many hackers attempts as their network grows daily. If only by the numbers alone do, we need greater cyber security.

The interplay of devices, along with the numbers, show an immediate and growing need for better cyber security. The question is how we implement such security over that many devices. The answer is we can't do it uniformly across the globe. Truly, the only way to implement true uniform cyber security is to educate anyone and everyone who has access to a Smartphone, tablet or computer.

Safety is in everyone's hands now

This may sound tedious, but, even a simple pamphlet inserted into every box or a default program that explains, in detail, how to set up your own network security.

Anything at all would be better than leaving everyone up to their own devices to figure out how to deal with the growing hacker threat. Unless someone is told they most likely won't know how to create strong passwords or use a VPN. They most likely wouldn't know how to even check for viruses or get rid of them.

In truth, most users, in general, do not know how to encrypt files or networks. The basic security standards are barely adequate to deal with the whole host of malicious software that battles around the web. That is why education is so important. The only true way to protect our global data is to Inform every user on the planet and put the power in their hands.

Conclusion

The Internet of Things is an idea worth getting excited about, but, the risks are not to be ignored. With the mass integration of our devices well underway, we must make sure to understand everything we can about cyber security. There is no complete answer, but, we know it starts with education. The numbers alone are enough to make your hair stand on end about the prospect of millions of compromised devices.

We cannot let this deter us from the future as the fight can be won with education and perseverance. We must not let hackers and malicious actors steer us from the path of progress. If we stay informed and well planned, then we will ultimately prevail in our race to the future.

Rashmi Urs M
III B.Sc

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.

VYSHNAVI M.S, III BCA

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

Role of Women in Tech and their Achievements

Tech has always been a predominantly male industry, with iconic male entrepreneurs such as Steve Jobs and Mark Zuckerberg gaining the most recognition for their contributions to the sector. However, women are playing a huge part too and more and more women are entering both regular and high level positions in tech, with the big global firms such as Apple, Google, Facebook, etc. hiring women 238% faster than men.

20% of all tech start-ups across the world were founded by women Woman represent 7% of the world's richest tech billionaires.

Rebecca Shanahan is CEO of the fastest growing company led by a woman, growing by $469.4 million in 3 years.

Zhou Qunfei, founder of LENS, is the richest female tech billionaire and is worth a huge $7.5 billion.

Few women achievers in tech field:

Ada Lovelace: Computer Programmer

Regularly recognised as the first computer programmer, Ada Lovelace was one of the early pioneers in the field. Lovelace, born in London, UK in 1815, was the daughter of the famous poet Lord Byron. However, she never knew her father and was steered away from the arts and influenced by her mother, who was mathematical minded.

Lovelace worked in conjunction with her friend and mentor Charles Babbage, on what was known at the time as 'The Analytical Engine.' Her key role was to translate the notes of an Italian Engineer, Luigi Meneabrea, from French to English, correcting many errors along the way. Her final translation was over three times the length of the original, with several early 'computer programs,' as well as remarkable observations on the potential uses of the machine. Although Babbage and his co-workers had some preliminary programs for his engine, he recognised that Lovelace's were much more comprehensive, and the first to be published. At the time Charles Babbage recognised her striking mathematical powers, and her unique capability for programming his calculating machine.

"The Analytical Engine has no pretentions whatever to originate anything," Lovelace stated in her notes. "It can do whatever we know how to order it to perform."

Admiral Grace Hopper: Computer Scientist and Programmer

Grace Hopper was a Mathematician, Computer Scientist and Navy Admiral born in New York in 1906.

She was instrumental in developing a new computer called UNIVAC I (Universal Automatic Computer I), which became one of the first commercial computers available in the US. During this time, she developed the world's first ever compiler, a program that transformed source code written in one high-level computer language into another one, (often machine code). Compilers were seen as revolutionary at a time when computers were mainly used for arithmetic computations. She was quoted as saying "I had a running compiler and nobody would touch it. They told me computers could only do arithmetic."

She subsequently developed a number of compiler-based programming languages, including FLOW-MATIC. The latter was the first English-based data processing language and lead to her development of COBOL (Common Business-Oriented Language). COBOL is still in use today, with 43% of banks built on the code, which also underpins 80% of all ATM transactions in the US .It is largely due to Grace Hopper's influence on helping develop these early programs that "if/thens" are used instead of 0's and 1's in coding today.

Grace received many accolades during her lifetime, including having a naval warship named after her.

Some of today's most well-known, and innovative tech companies were founded by outstanding women, including Cisco (Sandra Lerner), SlideShare (Rashmi Sinha), CEEK VR (Mary Spio) and Flickr (Caterina Fake).

Sheryl Sandberg is the second in command at Facebook, in the role of Chief Operation Officer (COO). She joined Facebook in 2008 and was the first female appointed to their board of directors in 2012. She was no stranger to the tech world and had previously had a successful career path at Google "We hold ourselves back in ways both big and small, by lacking self-confidence, by not raising our hands, and by pulling back when we should be leaning in."

Ginni Rometty, currently President and CEO of IBM. Rometty graduated in Computer Science and Electrical Engineering from North Western University, US in 1979. She originally joined IBM as a Systems Engineer in 1981, before going on to serve a number of senior roles.

She also encouraged women to be risk-takers at work stating, "I learned that growth and comfort never coexist…… Ask yourself when you learn the most. I guarantee it's when you felt at risk."

Radia Perlman, who was instrumental in the development of the world wide web. Her thesis researched the problem of routing in the presence of malicious network failures. Between her time completing her degree and PhD., Radio worked for Bolt, Beranek and Newman Technologies, and then Digital Equipment Corporation. It was at the latter company that Perlman developed protocols for routing network traffic, known as 'Spanning-Tree Protocols'. This ground breaking work enabled a critical feature of scalability of network traffic on the internet, making its existence possible.

Perlman holds over 70 software patents and has received many accolades including a USENIX Lifetime Achievement Award (2006), and an addition to the National Inventors Hall of Fame award in 2016. She is sometimes referred to as the 'Mother of the Internet', a title that she publicly rebukes, as she feels its invention is not attributable to one person.

Conclusion: Follow your dreams, nothing can stop a girl from achieving until she is determined and passionate and been supported. Your mind is a Weapon , Keep it Loaded.

Lakshmi Suchetha M.R.
III BCA

Source:
https://theundercoverrecruiter.com/role women-tech, wikipedia

BIOINFORMATICS

INTRODUCTION

Bioinformatics has become an important part of many areas of biology. In experimental molecular biology, bioinformatics techniques such as image and signal processing allow extraction of useful results from large amount of raw data. In the field of genetics and genome,it aids in sequencing and annotating genomes and their observed mutations.

Bioinformatics was invented by PAULIEN HOGEWEG and BEN HESPER

ABOUT THE ARTICLE

The classic data of bioinformatics include DNA sequences of genes or full genomes; amino acid sequences of proteins; and three-dimensional structures of proteins, nucleic acid and protein nucleic acid complexes. 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. Genomics refers to the analysis of genomes.

GOALS

1. The primary goal of bioinformatics is to increase the understanding of biological processes. What sets it apart from other approaches, however, is its focus on developing and applying computationally intensive techniques to achieve this goal.

2.Common activities in bioinformatics include mapping and analyzing DNA and protein sequences, aligning DNA and protein sequences to compare them, and creating and viewing 3-D models of protein structures.

Advantages:

Bioinformatics is being used in the building of global databases in microbiology to build an accumulative knowledge repository that captures the reams of experimental data and meta-data about microorganisms and to develop general data mining tools for knowledge discovery within this data-rich environment.

Bioinformatics is also helping in climate change studies.

The study of genomes of these microbial organisms, which is possible through bioinformatics.

Applications:

Microbial genome applications

Molecular medicine Personalized medicine

Preventative medicine

Gene therapy Drug development

Conclusion:

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.

PARVATHA.J, III BCA

Source: http://www.scq.ubc.ca.

Certificate Course on 'Data Warehousing and Data Mining

MACHINE LEARNING

Introduction:

The term Machine Learning was introduced by Arthur Samuel in 1959, an American pioneer in the field of computer gaming and artificial intelligence and stated that "it gives computers the ability to learn without being explicitly programmed". In the early days of AI as an academic discipline, some researchers were interested in having machines learn from data. They attempted to approach the problem with various symbolic methods, as well as what were then termed "neural networks".

DESCRIPTION ABOUT MACHINE LEARNING:

Machine learning (ML) is the scientific study of algorithms and statistical models that computer systems use to progressively improve their performance on a specific task. Machine learning algorithms build a mathematical model of sample data, known as "training data", in order to make predictions or decisions without being explicitly programmed to perform the task. Machine learning algorithms are used in the applications of email filtering, detection of network intruders, and computer vision, where it is infeasible to develop an algorithm of specific instructions for performing the task.

Let's try to understand Machine Learning, Consider you are trying to toss a paper to a dustbin. After first attempt, you realize that you have put too much force in it. After second attempt, you realize you are closer to target but you need to increase your throw angle. What is happening here is basically after every throw we are learning something and improving the end result. We are programmed to learn from our experience. Within the field of data analytics, machine learning is used to device complex models and algorithms that lend themselves to prediction; in commercial use, this is known as predictive analytics. These analytical models allow researchers, data scientists, engineers, and analysts to "produce reliable, repeatable decisions and results" and uncover "hidden insights" through learning from historical relationships and trends in the data set(input).

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.

In addition to completing countless tasks on our behalf, it is generating jobs. Machine Learning jobs rank among the top emerging jobs on Linked in with almost 2,000 job listings posted. And these jobs pay well: In 2017, the median salary for a machine learning engineer was $106,225. Machine Learning jobs include engineers, developers, researchers, and data scientists.

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.
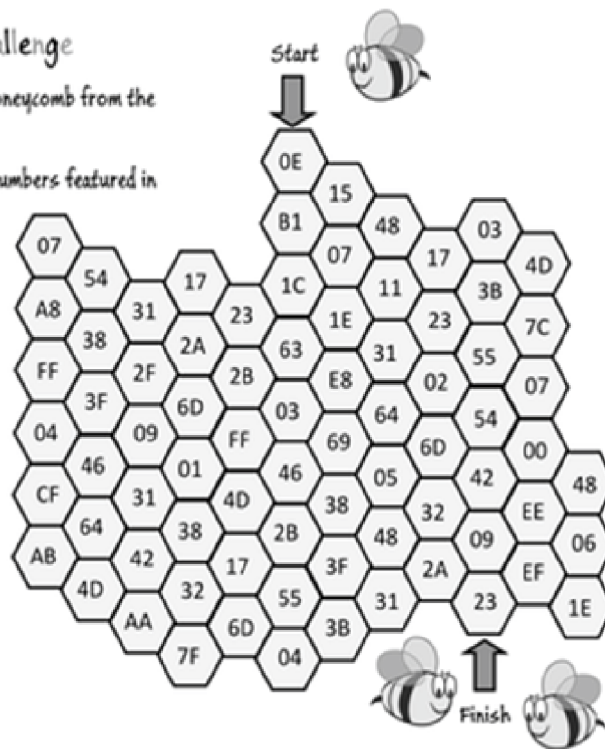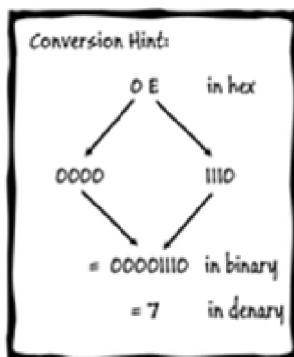
Swathi R., II BCA

Reference:https://towardsdatascience.com

HEXADECIMAL BUMBLEBEE CHALLENGE

Hexadecimal Bumble Bee Challenge

Help Bumble find his way through the honeycomb from the start to the finish by creating a path.

Colour in all the hexagons that contain numbers featured in the 7 times table. (7, 14, 21 etc..)

Conversion Hint:

Help bumblebee find its way through the honeycomb from the start to the finish by creating path

Color in all the hexagons that contain numbers featured in the 7 times table (7, 14, 21…..)

HARSHITHA B. II BCA

InQUIZitive

1. Which of the following languages is more suited to a structured program?
A.PL/1
B.FORTRAN
C.BASIC
D.PASCAL
Answer: Option D

2. A computer assisted method for the recording and analyzing of existing or hypothetical systems is
A.Data transmission
B.Data flow
C.Data capture
D.Data processing
Answer: Option B

3. The brain of any computer system is
A.ALU
B.Memory
C.CPU
D.Control unit
Answer: Option C

4. What difference does the 5th generation computer have from other generation computers?
A.Technological advancement
B.Scientific code
C.Object Oriented Programming
D.All of the above
Answer: Option A

5. Which of the following computer language is used for artificial intelligence?
A.FORTRAN
B.PROLOG
C.C
D.COBOL
Answer: Option B

Anusha K.S.
II BCA

Staff Achievements

- **Smt Sukrutha K.S. and Smt Ramya S.K.** attended half a day University Level workshop on "CBCS and CAGP Regulations for Undergraduate Programs - 2018-19" on 6th June 2018 organized by College Development Council at Vignana Bhavan, Manasagangotri, Mysuru.
- **Smt Nayana M.P.**, Assistant Professor of Computer Science attended Three Day Workshop on "Foundation Course on Data Analytics and Learning" organized at SJCE from 5th to 7th July 2018 organized by the Department of Information Science and Engineering and sponsored by Technical Education Quality Improvement Program(TEQIP) Phase III.
- **Smt K.S. Sukrutha & Smt V. Rajitha**, Assistant Professors of Computer Science, presented a paper on "iBeacon Based Mobile Feature Management System" at One Day National Conference on Emerging Trends in Digital Transformation, ETDT-2018 held at Government Women's College, Maddur on 30th July 2018 and got first best paper presenters award.
- **Smt Nayana M.P., Smt. Ramya S.K. & Smt Jyothilakshmi G. Kava, Asst. Professors,** presented a paper on "Impact of Digitization on E-Governance" at One Day National Conference on Emerging Trends in Digital Transformation, ETDT-2018 held at Government Women's College, Maddur on 30th July 2018 and got second best paper presenters award.
- **Smt K.S. Sukrutha,** Assistant Professor of Computer Science attended the NAAC Conference held at Ujire on 6th August 2018 .
- **Ms Shashikala R.,** Assistant Professor attended the workshop on "Data Analytics using R Language" held at Vijnan Bhavana, Manasagangothri, University of Mysore, Mysuru On 25th August 2018.
- **Smt Ramya S K** appointed as BOE member for the Computer Science Board and attended BOE Meeting from 18th September to 1st October 2018 held at Pareeksha Bhavan, Crawford Hall, University of Mysore, Mysuru.
- **Ms. Kavya R,** Assistant Professor attended workshop held at SDM College, Ujire on "Website Development" on 3rd October 2018.
- **Smt Ramya S.K. and Ms Kavya R.,** Assistant Professors of Computer Science, attended Two Day National Conference Travel Log'18- Tourism and the Digital Transformation and presented a paper on "Secured Railway Tourism using Biometric" on 5th and 6th October 2018 organized by Mahajana Post Graduate Center, Mysuru.
- **Smt Sukrutha K.S.,** appointed as BOE member for the Computer Science Board and attended BOE Meeting held at Government Women's College, Mandya (Autonomous) on 5th October 2018.
- **Ms. Shashikala R.,** Assistant Professor attended and presented a paper titled "Plant Identification Techniques (PNN and LBP) for an App" at 11th National Women's Science Congress held at JSS College for Women(Autonomous), Saraswathipuram, Mysuru from 9th to 11th Nove

Student Achievements

1. **Arpitha S.** of III BCA giving Lecture on the topic "Secondary Storage Devices to Imber 2018". I BCA students on 28th August 2018 as part of Student Faculty Programme.
2. **Chaithra M.Y.** of III BCA giving Lecture on the topic "File Handling in C++" to III B Sc students on 30th August 2018 as part of Student Faculty Programme.
3. **Yashaswini M.A.** of III BCA giving Lecture on the topic "File Handling in C" to I BCA students on 30th August 2018 as part of Student Faculty Programme.
4. **Chaithra Hegde** of III BCA giving Lecture on the topic "Bi stable Devices" to I BCA students on 30th August 2018 as part of Student Faculty Programme.
5. Winners of Interclass IT Quiz Competition organized by Tech Amateur IT Club on 23rd August 2018
   a. **Ms. Kusuma K. -** II BCA - I Prize
   b. **Ms. Sushmitha Sathish -** II BCA - II Prize
   c. **Ms. Anusha M. -** III B Sc - II Prize
6. Winners of Interclass Tech Talk Competition organized by Tech Amateur IT Club on 17th September 2018
   a. **Ms. Hamsini S. Kumar -** III BCA - I Prize
   b. **Ms. Lakshmi Suchetha -** III BCA - II Prize
   c. **Ms. Yashaswini M.A. -** III B C A - III Prize
7. **Sanmathi Patel D.** of II BCA has participated in the State Level NSS Youth Festival at Manasollasa Auditorium, Karnataka University, Dharwad from 12th to 16th October 2018.
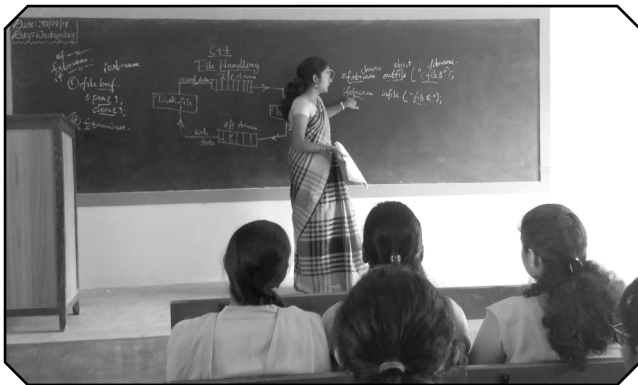
Chaithra M Y of III BCA giving Lecture on the topic File Handling in C++ to III B Sc students on 30th August 2018 as part of Student Faculty Programme.

Yashaswini M A of III BCA giving Lecture on the topic File Handling in C to I BCA students on 30th August 2018 as part of Student Faculty Programme.

Chaithra Hegde of III BCA giving Lecture on the topic Bi stable Devices to I BCA students on 30th August 2018 as part of Student Faculty Programme.

Under the banner of Tech Amateur IT Club organized Inter class Technical Talk Competition was conducted on 17th September 2018.

Interdisciplinary Lecture Programme was organized on the topic Stress Management by Smt B Srividya, Head and Assistant Professor of Commerce and Management Department on 26th September 2018 to III BCA students.

Smt Ramya S K and Ms Kavya R, Assistant Professors attended Two Day National Conference Travel Log'18- Tourism and the Digital Transformation and presented a paper on " Secured Railway Tourism using Biometric" on 5th and 6th October 2018 organized by Mahajana Post Graduate Center, Mysuru.

Guess the 'Firsts'

World's first computer
....

World's first programmer
....

The first video, published to YouTube.
....

The first commercial, digital and programmable robot
....

The First Communications Satellite
....

The First Graphical User Interface
....

The first web site
....

The first laptop
....

The first smart watch
....

Answers : ENIAC, Ada lovelace, me at the zoo, unimate, Telstar I, Xerox Alto, world wide web, Osborne 1, watch pad.

Lakshmi Suchetha M.R., III BCA

Photo Gallery

A talk on Current Trends in IT Sector by Mr Umesh S, Principal
Education Training & Assessment, Infosys India Limited, Mysuru on 27th July 2018 for all BCA students.

Smt K S Sukrutha & Smt V Rajitha receiving first best paper award at One Day National Conference on Emerging
Trends in Digital Transformation, ETDT-2018 held at Government Women's College, Maddur on 30th July 2018

Smt Nayana M P & Smt Jyothilakshmi G Kava receiving second best paper award
at One Day National Conference on Emerging Trends in Digital Transformation
ETDT-2018 held at Government Women's College, Maddur on 30th July 2018

Miss. Lakshmi M N, Alumnus, 2012-15 from B Sc who is working as Lecturer in
Computer Science BASE PU College, Mysuru gave a Lecture on the topic Permutation for
I BCA students on 16th August 2018 as part of Alumni Faculty Programme.

Interclass IT Competition was organised by
CECS PEPH Amateur IT Club on 23rd August 2018

An Internet Awareness Programme was organised for the students of
Sharada Vilas Girls High School on 29th August 2018 as a part of Extension Programme.

Arpitha S of III BCA giving Lecture on the topic Secondary Storage Devices
to II BCA students on 28th August 2018 as part of Student Faculty Programme.

Ms. Shashikala R, Assistant Professor presented a paper titled Plant
Identification Techniques (PNN and LBP) for an App at 11th National Women's Science Congress
held at JSS College for Women(Autonomous), Mysuru from 9th to 11th November 2018.

Aishwarya K.P.
199/200 - VI BCA

Monica M.
198/200 - VI BCA

Yogitha M.
565/600 - IV BCA

Chaitra Hegde
549/600 - IV BCA

Yashaswini M.A.
539/600 - IV BCA

Divyashree M.
358/400 - II B.C.A.

Kusuma K.
357/400 - II B.C.A.

Kusuma K.
3497/400 - II B.C.A.

Rashmi Hebbar S.
267.300 - VI B.Sc.

Harshitha Urs
248.300 - VI B.Sc.

Ranjitha N.
245.300 - VI B.Sc.

Divyashree M.S.
91/100 - IV B.Sc.

Manasa D.
91/100 - IV B.Sc.
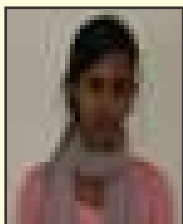
Chaitra M.P.
91/100 - IV B.Sc.

Nikitha
88/100 - IV B.Sc.
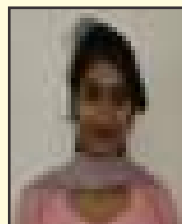
Rashmi Urs M.
88/100 - IV B.Sc.

Chaitra R.
87/100 - IV B.Sc.

Shravya C.S.
98/100 - II B.Sc.

Padma M.
83/100 - II B.Sc.

Sushma M.
83/100 - II B.Sc.

Rachitha P.N.
83/100 - II B.Sc.

Surabhi B.
83/100 - II B.Sc.

Tejaswini P.
82/100 - II B.Sc.

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Student Editor

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