

The Ball Magazine Of
I.T. Department
“INNOWAVE”



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CYBER SECURITY

The internet has become the integral part of today's generation of people; from communicating through instant message and e-mails to banking, travelling, studying and shopping internet has touched every aspect of life. With the growing use of the internet by people, protecting important information has become a necessity. A computer has is not having appropriate security controls can be infected with malicious logic and thus any type of information can be accessed in moments. Number of infected web pages and malicious websites can be seen every day that infects the computer and allow hackers to gain illegal access to other computer systems.

The increasing use of the internet and social media has made cyber security even more important than it was before. Growing cyber threats such as data theft, phishing scams and other cyber vulnerabilities demand that users should remain vigilant about protecting data. It is essential to understand the varied type of risks and vulnerabilities that exist in the internet world. For every user, it is important to think before connecting to someone using online medium. Users should also think prior to sharing any information with other user through the internet.

Shivam Mani Tripathi
IT (1st Year)

Pokemon Go, was a devastate change over Niantic labs after its previous awesomest game 'Ingress' with tagline:

"The world around you is not what it seems"...'

Both the android games (released in) are based upon Augmented Reality or Alternative Reality game with location based variations happening! It was in Nov, 12, Ingress was released with the goal of whole of the game was depending over the portals that required to be captured at places which are significant or popular contributing of landmarks, public known places so that occurring no direct interaction between any of the players, and there's a fight among two fractions namely 'frog (toads' and 'Tadpoles' over a Triangles 'Control fields' made to link a geographical area about the 'human evolution' & XM's for power reduces when someone loses or wins; increases in fight.

(XM: Exotic Matter) & someone if works excellent & completes the tasks, badges are allotted to same as 'Bronze, Gold, Silver, Platinum, & Onyx' & mission further were included as the game reached millions. It was excellent work done by them making children, as well as adults involving into various sorts of activities, lesson about geographical area, exercise increased, learning of connectivity, control fields and all sorts of social interaction even with usage of almost all features of phone. It was linking of three portals in a triangle that made a 'control fields' Due to its location & AR feature, it widespread being part of Google and it slowed down afterwards because of its complexities until when 'Pokemon Go' was released after Google split from Niantic labs & the same game bombarded as a balloon bursts in air & air molecules spread all over the world,

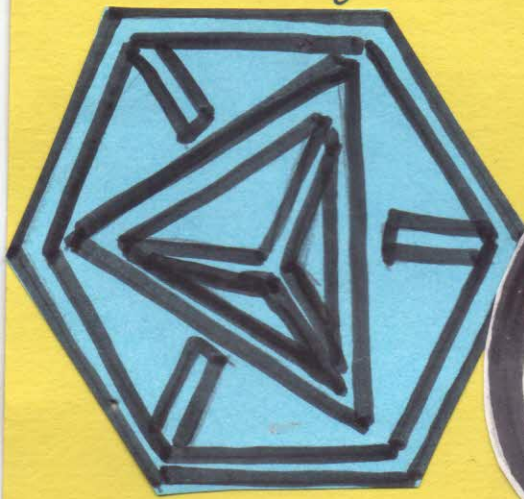
Japan & china and people adulate them so much that itself in Japan, 85% of them were mad about this game playing day & night. After all this accompanied with the same but upgraded features with much greater & better looks & more interesting in playing with three factors:

Intrinsic (Yellow), Valor (Red) & Mytic (Blue), aim changed to collecting pokemons & evolving with XM changed to XP's and more HP, CP (Combat Power) included to make it more exciting. The company passed over billions of revenue making people busy, roam around night, day catching pokemons

But it was the same thing, which with just a little variation & inclusion of people's liking with simple interface made the Niantic labs 'Pokemon Go', the one of the best AI android games in the world. with tagline:

"Catch'em all"...

- Shivani Gautam
B.Tech (IT) 3rd yr.



Topic Dated

INTELLIGENT IOT

"Bringing the power of AI to the Internet of things"

The IOT is getting smarter. Companies are incorporating artificial intelligence. In particular, machine learning into their Internet of things applications and seeing capabilities grow including improving operational efficiency and helping avoid unplanned downtime.

With wave of investments, a raft of new products and a rising tide of enterprise deployments, artificial intelligence is making a splash in the Internet of Things (IOT).

The powerful combination of AI and IOT technology is helping companies avoid unplanned downtime, increase of opening and operating efficiency, enable new products and services, and enhance risk management.

Growing demand for the IOT and AI is expected to drive large investment in SAAS / cloud and big data technology. 75% of respondents said their organisation was increasing investments in big data technologies.

'AI and IOT will drive digital transformation through 2020'.

- Mansi Gupta
IT (2nd yr)

BLOCK CHAIN

There's a lot of hype in the air about blockchain technology at the moment. A recent World Economic Forum report predicts that by 2025 10% of GDP will be stored on blockchain related technology. This means it's probably something with everyone involved in business should take notice of. However, there's still a lack of understanding about what it is, and what it does.

One way people describe blockchain technology is the "internet of value". But it deserves a closer inspection. We have become used to sharing information through a decentralized online platform (the internet). But when it comes to transferring value - for example money - we are usually forced to fall back on banks. Even online payment methods which have sprung into existence since birth of internet - Paypal being most obvious example.

Blockchain technology offers the intriguing possibility of eliminating this "middle man." It does this by filling three-important roles - recording transactions, establishing identity and establishing contracts - traditionally carried out by financial service sector.

Worldwide, financial services market is largest sector of industry. If blockchain can replace just a section of that by enabling peer-to-peer transactions in other sectors then it has potential to create huge efficiencies.

The technology was initially pushed into headlines several years ago. The value of one unit of currency rose from pennies to over £\$1,000 between 2011 and 2013, making handful of early adopters very wealthy. This generated press interest. Since then, while Bitcoin's value may have fallen and currency established stable growth the buzz around blockchain concept has intensified.

- Prabhat Lokwani
IT

Internet of Things

The Internet of things or IOT, refers to the billions of devices around the world that are now connected to the internet, collecting and sharing data.

This adds a level of digital intelligence to device, enabling them to communicate without a human being involved.

The term IOT is mainly used for devices that wouldn't usually be generally expected to have an internet connection and that can communicate with network independently of human action. For this reason a PC isn't considered generally an IOT device. and neither is a smart phone. A smartwatch or a fitness band must be considered as an IOT device.

Application of IOT devices includes consumer applications like smart homes, commercial applications like medical and healthcare, industrial and infrastructure applications.



SCANTER

Scanter is a scanner cum printer device which will be very helpful for students in making notes. It will make it easier for students to summarise and note the important points separately. It has a normal laser boundary which highlights the area to be scanned. Graphs, Tables, Pie-charts & paragraphs can be scanned by using this device.

But sometimes, we only need some points or some lines from a content. So for that there is a highlighting pen (can only be captured by the scanner) which can be used to underline the lines you want to scan. After underlining the lines you can scan the whole page but only highlighted lines will be scanned.

This device can directly transfer the scanned content onto a plain sheet of paper.

It is a direct device which can be used for both scanning and printing by the students. After this device there is no need of big printers, scanners and electricity too

— **BHUMIKA**
B.Tech (IT)
1st Year ●●●●●

CAN Your DATABASE Survive A Disaster

Oracle Database provides several unique technologies that complement Data Guard to help keep business critical systems running with greater level of availability & Data protection during Disasters.

One of the premium technology is Real Application Cluster[RAC]. It enables multiple independent servers that are linked by an interconnect to share access to an Oracle database providing high reliability, scalability and redundancy during failures.

RAC & Data Guard together provide benefit for both system level, site level, and data level protection; resulting in high level of availability and disaster recovery without the loss of data.

KEY Benefits

- * Centralized and Simple Management.
- * Disaster recovery, Data protection and high availability.
- * Efficient use of System Resources
- * Flexibility in data protection to balance availability against performance requirements.
- * Automatic gap detection and Resolutions.

- Anubha Jain
IT (3rd yr.)

"ONLINE FRAUD DETECTION USING MACHINE LEARNING"

Machine learning (ML): is the science of designing and applying algorithms that are able to learn things from past cases. It uses complex algorithms that iterate over large data sets and analyse the patterns in data. It is used in spam detection, image recognition, product recommendation, predictive analytics etc.

The online frauds that occur these days so often during transactions are uncontrollable due to the plethora of payment channels such as smart phones, etc. Since, the manual verification of buyers and sellers is a time-consuming process, Machine Learning should be used in fraud detection. With increasing data sets, this method of prediction can adapt easily and quickly. Contrary to humans, machines can perform iterative tasks with great efficiency.

The fundamental steps that can be followed for fraud detection are simple to think but relatively difficult to achieve its practicality. First of all, there needs to be extraction of data sets from all possible sources. We need to predict some kind of output, in this case a Boolean value which tells the user that it is a fraud or not, which leads us to two models that are to be built under Machine Learning, Classification & Regression. Techniques like Logistic Regression, Decision Tree and Random Forest may be used to enhance the ability of prediction of machine.

Overall, Online Frauds can be simply detected through ML as the machine learning model would just gather previous order details from the related transactions, the data set will be processed. The fraud risk will be estimated which will accept or reject a particular online transactions.