

NEWSLETTER

COMPUTER SCIENCE DEPARTMENT



KALINDI COLLEGE

2019-20



DR. NIDHI ARORA
TEACHER IN-CHARGE &
COORDINATOR



DR. SUSHIL MALIK
EDITOR



MS. RAJANI
EDITOR

National Conference on Emerging Trends in Information Technology- 2019 (UGC Sponsored)

Organised by

**Department of Computer Science,
Kalindi College**

1st and 2nd August 2019

Patron & Chair : Dr. (Ms.) Anula Maurya

Convener : Dr. Nidhi Arora

**Co-Conveners: Dr. Vandana
Gupta, Ms. Shalini Sharma**

The UGC sponsored National Conference on Emerging Trends in Information Technology (NCETIT-2019) was inaugurated on August 1, 2019. The ceremony commenced with lighting of the lamp by the honourable chief guest Prof.(Dr.) Bhagirath Singh, Vice Chancellor of Maharaja Ganga Singh University, Bikaner, Guest of Honour Prof. Vasudha Bhatnagar, Head of Department of Computer Science, University of Delhi and Principal Dr.(Ms.) Anula Maurya. After welcoming of guests, Dr. (Ms.) Anula Maurya motivated all the participants and attendees with her words of wisdom. She also recited a beautiful poem and inspired all to always move forward. The extremely intellectual, Professor Bhagirath Singh who had more than 30 years of experience in the field of research, explained how important information era is for the national development. He also shed a light on data analysis, data mining and the challenges in the sector of Information Technology in future, and stressed that the conference should also focus on the

overpowering of humans by AI and the effects of social media on society. The further proceedings of the ceremony were led by Prof. Vasudha Bhatnagar. She briefed everyone on the usage of Artificial Intelligence in vast variety of applications and the associated potential risks. She also discussed about the transparency of AI and the importance of algorithmic fairness. She wished for the success of the conference and congratulated the computer science department for a commendable job.

Total 81 participants registered for this two days conference. In overall 7 Keynote Talk and 6 Technical Paper presentation sessions were held during the conference. The venues were Administrative block seminar room for Keynote talks and Computer labs for Paper Presentations. In overall 42 abstracts were submitted for presentation in the conference from all over India out of which 34 were presented. A souvenir containing all the abstracts was also printed and released on the occasion. The 7 invited Keynote Speakers were renowned names in the field of Computer Science and IT from various prestigious Universities of India as listed below and were Prof R. K. Agrawal (Jawahar Lal Nehru University), Prof Khurram Mustafa (Jamia Millia Islamia University), Prof Devendra Kumar Tayal (Indira Gandhi Delhi Technological University), Dr. Hema Banati (Dyal Singh College, University of Delhi), Dr. Shikha Mehta (Jaypee Institute of Information Technology), Dr. Suraiya Jabin (Jamia Millia

Islamia University) and Dr. Akshi Kumar (DTU). The six technical paper presentation sessions were chaired by eminent academicians and researchers as :Dr. Naresh Kumar, Professor (Galgotia University), Dr. Veenu Bhasin (PGDAV College), Dr. Anamika(SSCBS, University of Delhi),Dr. Shalini Arora(IGDTUW),Dr. Darshna Hooda(Head University Computer Centre, DCRUST Murthal).

KEYNOTE SESSION-1: The National Conference on emerging trends in IT was organized by computer science department of Kalindi College had its first keynote session on 1st August 2019 in the seminar room from 12pm to 1pm with the keynote speaker Prof K. Mustafa from Jamia Millia Islamia University. Prof Mustafa was warmly welcomed by researchers, teachers and students. The speaker started the session entitled “Information Technology: Trends and Tipping Points”. The session was quite the acquisition of technical facts and understanding.

He covered the topics like purpose-the cursory overview in which he explained that IT is the king of all subject and it is not for one particular group but for all types of people, difference between Information Technology, Computer Science Information System where IT is developed as a tool,

tool is evolved as a method and then becomes a process, IT horizons, recent trends (Gartner’s 2016, WEF’2016), trends 2018(Fuji software, forbes) and many more. He also discussed what are the challenges occurred in computer science in the field of non-classical computation, important work on storage, e-science, X- info and e-research. Many technical as well as philosophical questions were raised by the participants and answered by the speaker.

KEYNOTE SESSION-2 : Dr. Shikha Mehta , an associate professor from IIIT Noida was the speaker in keynote session 2. She spoke on the topic titled “Machine learning to deep leaning : A walkthrough ”. She interpreted the need of machine learning and

explained that we are drowning into data. So, this much data can’t be handled by human. That’s why we teach our machines to do this work for us. But she raised a question if our machines can do it accurately? Further she expressed that Internet is the

most unreliable source of data. Thus, it’s all up to us how accurate we have taught our machines to do work and how accurate are our algorithms that we have taught to our machines. So, to check accuracy machines are tested with small data first and then they generate their own algorithms to operate with



big data. Next she also explained the three types of machine learning i.e. supervised, unsupervised and reinforcement learning. She said that machines can't do machine learning unless we will teach them properly and accurately. Though it is a time taking and expensive process to teach machines but once it's done, it'll save human time and efforts a lot up to a great extent.

KEYNOTE SESSION-3: Third keynote session on 1st August 2019 in the seminar room from 3pm to 4 pm started with the keynote speaker Prof D.K. Tayal from Indira Gandhi Delhi technology University. The speaker started the session entitled "Natural language processing of Hindi Language". The session was quite the acquisition of technical facts and understanding. He gave us the brief idea about "what is Natural language processing". He discussed about the available natural language processing systems (START system) and its disadvantages. After that he briefly explained some of the challenges in NLP. Further he covered the topics like complexity of Hindi language, huge vocabulary of hindi language, wrong interpretation by Google etc. He talked about Sophia, first humanoid robot and played a video of Sophia's interview. After that finally he explained his research methodology. There were 3 steps in the proposed method which are - Collection of data in confusion matrix, Generation of candidate list and Viterbi algorithm for finding most appropriate candidate word. Each and every step was explained

nicely. Then he introduced his own NLP system "UTTAM" and explained how "UTTAM" resolves all the ambiguities for NLP. He also showed the java code of UTTAM and showed the working of UTTAM live.

KEYNOTE SESSION-4: On 2nd August 2019, the second day of the National Conference held on Emerging Trends in Information Technology, the keynote speaker Prof R. K. Agrawal from the School of Computer & Systems Sciences, Jawaharlal Nehru University, addressed the audience and apprised all about the "Deep Learning Models And its challenges". He began by explaining the need for practical learning and learning through examples. It was followed by an explanation of the key concept of Machine Learning and its various applications like face recognition, fingerprint recognition, and self-driving car. Along with that, he discussed the typical goals of machine learning. Then he proceeded further and illustrated the types of machine learning: supervised learning(task-driven), unsupervised learning(data-driven), reinforcement(learn from mistakes). He also introduced the audience with various algorithms that are used in machine learning like nearest neighbour algorithm, K-Nearest neighbour algorithm, algorithm to find a decision boundary. The next section of his address was dedicated to the explanation of neural network, gradient descent learning rule, and multilayer perceptron(MLP). While concluding, he explained the

idea behind deep learning, how it is different from machine learning, and the challenges of deep learning.

KEYNOTE SESSION-5: The keynote speaker Dr. Suraiya Jabin, Associate Professor, Department of Computer Science, Jamia Millia Islamia(central university) addressed the audience on the Topic “Artificial intelligence techniques and its applications” in this session. She began by explaining what is AI which was followed by explanation of history of artificial intelligence ,the



Turing test, notions of artificial intelligence, different artificial intelligence techniques etc. Along with that, she told about AI based fiction such as Doraemon, Shinchan etc. She gave various examples of supervised learning such as EMAIL, Audio, Ad etc. she also introduced the audience with deep learning, job and AI ,DIGI YATRA. In further section she illustrated the difference between computer neurons and human neurons, neural nets for face recognition. While concluding, she told about various articles on Artificial intelligence such as – MIT’s pic2 recipe app, „Watch, Attend and Spell“, and the challenges of Artificial learning.

KEYNOTE SESSION-6 : The keynote speaker Dr. Akshi Kumar from DTU addressed the audience on the topic “Social media mining for sentiments : Techniques and trends” in this session. Social media

mining is the process of obtaining big data from user generated content on social media sites like facebook, twitter etc. Social media mining is done to extract patterns, form conclusions about users, and act upon the information often for the purpose of advertising to

users or conducting research. It uses a range of basic concepts from computer science, data mining, machine learning and statistics. Social media mining is used across several industries including business development, social science research, health

services and educational purposes. Prior to social media analysis web mining is done to gather the information from unstructured and irrelevant data. After gathering the relevant information social media analysis is done by the social media analytics to conclude the information and gathering the knowledge about the data. Social media analysis also includes sentiment analysis. Sentiment analysis is the computation study of people's opinion, attitudes, emotion towards an entity. Sentiment analysis is a major part of social media mining. It is because social media users often relay positive or negative or neutral sentiments in their posts. Sentiment analysis provides important social information about users emotions on specific topics. There are three techniques used in sentiment analysis lexicon based, machine learning and the hybrid of these two. There are number of

challenges in sentiment analysis. This includes negation handling, unstructured data, slangs, abbreviation, noise, co-reference resolution, ambiguous words, colloquial words, mashup language etc. The solution to these problems is the soft computing. Soft computing encompasses a set of computational techniques and algorithms that are used to deal with complex systems. It uses a number of techniques which includes machine learning, neural networks, probabilistic reasoning, evolutionary computing and fuzzy logic. Among these machine learning is the most used technique for soft computing.

KEYNOTE SESSION-7: The seventh keynote session of National Conference on Emerging Trends in Information and Technology (NCETIT-2019) was held on 2nd August, 2019. Keynote speaker of the session was Dr. Hema Banati, Associate Professor of Dyal Singh College, University of Delhi. The title of the talk was “Nature Inspired Techniques and Their Applications”. She began with discussing about how nature influences the invention of various applications, such as the Japanese bullet train whose inspiration was a kingfisher. Then, she briefed about advantages of these technologies, why nature and this is correlated, problem solving strategy using technology and different kinds of algorithms applied for solving such problems, and also talked about how Word of Mouth (WOM) and E-WOM affects the marketing process. The chief module of her presentation was nature inspired outlook for the

market, that focussed mainly on viral marketing. The prime target for viral marketing these days is social networking sites that take into account general people’s opinion to transfer WOM through internet, further leading to widespread promotion of products. In her presentation, the targeted users (users of high network values) were referred to as seeds. The technique of fireflies, proposed by Xin-She Yang, was used. She developed a three-tier structure whose first step was market analysis, in which the best feature for a particular type of audience was selected by applying evolutionary algorithm. This was followed by market segmentation in which the market of potential customers is divided into groups based on different characteristics. The final step was targeted product promotion. The products were marketed and sold after considering the preferences of the users. She concluded by saying that nature plays a great role in the development of a number of methods and how it is vital for efficient marketing. She also added that she is looking forward to making more advances in this field of research. Overall, the session was significantly knowledgeable, with every detail explained remarkably.

Sexual Harassment Awareness

Workshop

(POSH Act)

September 11, 2019

The Sexual Harassment Awareness workshop on 'POSH Act' was conducted by the department of the

Computer Science, Kalindi College on September 11, 2019 for an hour in Computer Science Lab Room, Kalindi College.

The session was conducted by Mr. Anand Manocha, Co-Founder and Director from Forenithics Consulting India Private Limited.

He discussed about the POSH Act, its purpose, gender



sensitization and sexual harassment. He gave an insight into the impact of sexual harassment on women empowerment in their professional life and career. He highlighted various ethical dilemmas with different harassment incident.

Mr. Manocha defined various key terms in POSH Regulations 2015 and POSH Act 2013 like Sexual Harassment (SH), Aggrieved Women (AW) for Employee, Student in the Workplace. He explained what sexual harassment through various case studies. He told about the Internal Complaints Committee (ICC) and women cell operating in various institutions such as colleges, schools and offices. The Internal Complaints Committee in the college comprises of a

Presiding Officer, two faculty members, three students and one member from an independent NGO.

Mr Manocha encouraged the students to be responsible and spread awareness about Sexual Harassment incidents. Often women do not report these issues due to fear of defamation. Therefore it is necessary to know about the rights of the respondent. He persuaded students to be responsible and support the aggrieved person to report the issue.

It was an interactive workshop where students and teachers raised questions and the appropriate solutions were given by the speaker. The workshop had a huge participation of students. Around 70 students belonging to various courses such as B.Sc(Hons.) Computer Science and B.A. Program in Computer Application were benefitted by this workshop.

Student Webinar - Managing Psychological Lockdown

The webinar on 'Managing Psychological Lockdown' was organized by Dr.Nidhi Arora, Teacher In-charge, Department of the Computer Science, Kalindi College and teacher Coordinator Dr.Reena Jain and Ms.Arokiya Ramya on May 6, 2020 for an hour from 12 noon to 1 PM for the students of Kalindi College through Google Meet.

The session was conducted by Dr. Shivani Raheja, Life Skill Trainer & Mentor who is also working as Assistant Professor in Aryabhata College, University of Delhi. The session was started with the introduction of speaker by Nidhi Arora. The speaker was

emphasizing on the importance of life skills, especially in the times of crisis of Covid-19 and activities to overcome the psychological pressure within us.

The session was divided into 3 parts such as ‘What is Psychological Lockdown?’, ‘Why managing it so difficult?’ & ‘How can we manage it’. The speaker asked the participants to calculate the stress rating from 1 to 10 based on 10 parameters and divided into 3 groups, out of which student with lower score (less than 3) advised to mingled with the stress buddies who have score greater than 7. The speaker advised the participants to maintain the well balanced life by prioritizing daily activities, emphasizing other people around us, increasing faith, introspecting the gaps in achieving the goal, managing the stress through exercise, meditation and optimistic thoughts.

The webinar had a huge participation of students and faculty of Computer Science department namely Dr.Nidhi Arora, Dr. Vandana Gupta, Ms. Sweety Rani, Dr. Reena Jain, Ms. Arokia Ramya, Ms. Rajani, Dr. Yogender Meena, Ms. Neha Singh, Dr. Diksha Grover, Ms. Uma VetriSelvi and Ms. Asha. Around 44 students belonging to various courses such as B.Sc(H) Computer Science, B.Sc Physical Science, B.Sc(H) Mathematics, B.Sc(H) Chemistry, B.A(H)Political Science,B.A(H) History, B.A(H) Economics, B.A(H) Journalism, B.COM Program, B.A Program were benefitted by this webinar.

CYBER SECURITY WORKSHOP

The workshop on “Cyber Security” was organized by the department of Computer Science, Kalindi College on 21st September 2019. The workshop started from 12:00 PM to 2:00 PM. It was held in Computer Science Lab Room 1, 2nd floor, Academic block, Kalindi college.

The session was conducted by Mr. Lokesh Verma and Mr. Kanishk Gandharv. Mr. Lokesh Verma . Lokesh Verma has 16+ years of total experience, He has spent 15 years with Indian Navy and from last 2 years in Corporate sectors (Wipro and currently in HCL Noida). He was part of various cyber security operations in Navy , Ministry of Defense and others precious Govt Security agencies. He is specialized in performing Incident Response , threat Intelligence, handling Cyber Security operations, Forensics and Cyber Crimes. Presently he is working with HCL Noida from last 7 months and assist in growing more in Enhancing Cyber Security capabilities overall.

Mr. Kanishk Gandharv is an Cyber security expert with 6 years of experience. He has pursued BCA and is certified in offensive security. He is experienced in strategic planning of security controls and their integration, defeating existing security controls and security product evaluation as per the organization requirements. His key skills includes Internal/External network penetration testing, Black-box penetration testing of mobile and web applications, excellent knowledge of programming languages. He has excellent hands on skill in commercial security

tools like Metasploit, Core Impact, Nessus, BurpSuite, Acunetix and Development of malware and security solution.

The workshop started with a brief introduction of the speakers by Ms. Ramya. At first, Mr. Lokesh Verma asked the audience questions regarding the courses they belonged to for better understanding of his respective audience. The topic discussed by Mr. Verma was cyber security and forensic application. He gave many useful insights of the cyber security and crimes related to it and respective safety measures. Many demo of phishing, phone hacking, personal computer hacking was shown. He made the audience aware about the value of data and how can it be misused by people. Mr. Kanishk Gandharv spoke about ransom ware, Wannacry, and how it affects our personal information. Many methods of prevention and detection were discussed by Mr. Lokesh Verma. He encouraged students to ask question which he answered enthusiastically. The benefits of choosing cyber security and forensic as a career were discussed in a great length by Mr. Lokesh Verma. He gave insights about the various acts that government has established to protect us from cyber security. At the end, question and answer session was held. The workshop was attended by faculty member of Computer Science department and students of various courses like B.Sc(H) Computer Science, B.Sc(H) Physical Science, B.A (Program), B.Sc(H) Economics, B.Sc(H) Mathematics, B.A(H) English, B.A(H) History, B.A (H) Sanskrit.

B.Voc .Around 65 students attended the workshop and were benefitted greatly. The workshop ended successfully

Cambridge English Soft Skill Workshop

The Cambridge English Soft Skill workshop was conducted by the department of the Computer Science, Kalindi College on Tuesday, November 5th 2019 for an hour from 12:15 pm to 1:15 pm in Computer Science Lab Room 2, 2nd floor, Department of Computer Science, Academic Block, Kalindi College. The session was conducted by Mr.Vikash Bhartiya, Business Development Manager-North India, Cambridge Assessment English.He discussed about the current scenario of skills across Asia Pacific region and the lack of availability of key skills such as soft skills. He also gave insights about the increasing footfall of the latest technologies namely AI and automation, the importance of soft skills, and India's biggest strength in skill set such as critical thinking and problem solving compared to other countries. The speaker defined various key terms in BEC Qualification and the Common European Framework of Reference for Language (CEFR). The CEFR sets standards of English across various countries. It was an interactive workshop where students and teachers raised questions and the appropriate solutions were given by the speaker. The workshop had a huge participation of students. Around 56 students belonging to 1st year and 3rd year of B.Sc(H) Computer Science course were benefitted by this workshop.

Session on Anti Grievance Redressal Regulations

The Computer Science department of the Kalindi College, University of Delhi organized a 1hour session on Anti-Ragging and Grievance Redressal and Regulations in Lab 2 of Computer Science Department, 2nd Floor Academic Block, Kalindi college on 23rd October 2019 from 11 am to 12 noon.

The speaker of the session was Anand Manocha, Co-Founder and Director of Forentics Consulting India Private Limited, Gurugram. AnandManocha has 15 years of total experience, out of which, nine years with KPMG Consulting Company. He managed Ethics Hotline operations at KPMG for over 5 years. He has worked on the implementation of Ethics and POSH hotline and created company policies like code of conduct, whistle-blower policy, anti-sexual harassment policy in line with the regulatory requirements and industry best practices.

The speaker started the session with the definitions and objectives of the Anti-Ragging session. He discussed some of the ethical dilemma of the students in the ragging incident through case studies. He made the audience aware about the measures to be taken for prevention of ragging, actions to be taken by the college institution and various duties and responsibilities of the respective commission and councils. He also gave insights about the actions that would be taken by the administration in case of any ragging incident.

Mr Anand Monacha then move to his next topic that was Grievance and Redressal Regulations in UGC. He discussed about the objective and definition of the topic. He discussed some of the ethical dilemma of the students in the grievance incident through case studies. He also talked about the appointment and tenure of the members of the grievance committee of the college. He explained the working of the grievance committee in college and university. He discussed about the function of Ombudsperson, and his duties and responsibilities with respect to the student grievance redressal committees.

The session had a huge participation and was attended by 44 students. There were 27 students from 3rd year and 17 students from 1st year of B.Sc(H) Computer Science. It was an interactive session and was appreciated by students as well as faculty members. The session ended successfully.

Data Analytics Workshop

The Data Analytics Workshop was conducted by the department of the Computer Science, Kalindi College on January 20, 2020 from 10:30 am to 12:30 pm in Computer Science Lab 3, Computer Science Department, Academic block, Kalindi College.

The session was conducted by Mr. Nitesh. He is a MBA graduate. He has ten years experience in training students in data analytics at BSE Institute Limited, Rajendra Place. He has trained over 500 students.

Mr. Nitesh started the session with a brief introduction of data analysis. He explained about the application of data analysis in different business. He gave insights on the issues of the practical implementation of data analytics applications such as banking, Human Resource and telecommunications services. He talked about the difference between classification and regression.

He also talked about different types of the machine learning such as supervised learning, unsupervised learning and reinforcement learning. He explained the different stages of analytics like Descriptive analytics, Predictive analytics and Prescriptive analytics. He introduced the basic concepts of R programming. He also explained the different syntax, output and application of R programming. The students were given the opportunities to ask questions to which he gave appropriate solutions.

It was an interactive workshop where students raised questions and the appropriate solutions were given by the speaker. The workshop had a huge participation of students. Around 49 students of B.Sc (H) Computer Science benefitted from the workshop.

After computer, Robotics taking over the education system in schools

Shubhangi Mittal 18570035

B.Sc.(H) Computer Science 2nd year

In today's technology-driven world, it is imperative for students to stay equipped with tech-innovations around the globe. Though the whole STEM (Science, Technology, Engineering and Mathematics) education can be considered a vast ocean of information and knowledge. If learners are exposed to STEM education at an early age then their young minds are capable of grasping information fast, building a stronger foundation.



STEM education in India

Technology, Computers, Engineering and Robotics have never been an integral part of school education system.

Only a few years back only has computer information (ICT) has become a mandatory part of the evaluation system.

Educating students about computer and its functionalities expose them to the domain of STEM education and enhance and improve their learning abilities like critical thinking, creativity, collaboration and communication.

With the incorporation of ICT student's interest are further stimulated in sciences and technology field.

Robotics, a significant part of STEM

Many governments across the globe have recognised the significance of Robotics in the classroom and as a part of young education. Thus they have developed plans to incorporate them.

Introducing Robotics at a young age would help students explore the subject and develop interest at an early age. Also opening them to a whole wide new opportunities that they otherwise would never be aware of.

Demand for Robotics in education

Since the young minds are already exposed to a lot of technology at a tender-age, they will probably be more interested in technology and computational discoveries.

Robotics Lab, an integral part of a school

Learning to programme a computer is an excellent skill. But teaching young minds the looping concepts and programming can be challenging as it is often too complex and difficult to understand. Whereas Robotics, is comparatively simpler to understand and tangible.

While programming physical robots, students can easily understand the details and capabilities of robots

and have fun filled interactive sessions. Inquisitively design the robots and be more curious. Introduction of STEM subjects can rise creativity amongst learners, motivate them to innovate, make them future-ready, Robotics Lab is all about empowering learners and introducing it in schools can translate into successful futures.

How Robots can help combat COVID – 19

Shivani Negi 18570072

B.Sc.(H) Computer Science 2nd year

Can robots be effective tools in combating the COVID-19 pandemic? A group of leaders in the field of robotics, including Henrik Christensen, director of UC San Diego's Contextual Robotics Institute, say yes, and outline a number of examples in an editorial in the March 25 issue of Science Robotics. They say robots can be used for clinical care such as telemedicine and decontamination; logistics such as delivery and handling of contaminated waste; and reconnaissance such as monitoring compliance with voluntary quarantines.

"Already, we have seen robots being deployed for disinfection, delivering medications and food, measuring vital signs, and assisting border controls," the researchers write. Christensen, who is a professor in the Department of Computer Science and Engineering at UC San Diego, particularly highlighted the role that robots can play in disinfection, cleaning and telepresence. Other co-authors include Marcia McNutt, president of the

National Research Council and president of the National Academy of Sciences, as well as a number of other robotics experts from international and U.S. universities. "For disease prevention, robot-controlled noncontact ultraviolet (UV) surface disinfection has already been used because COVID-19 spreads not only from person to person via close contact respiratory droplet transfer but also via contaminated surfaces," the researchers write. "Opportunities lie in intelligent navigation and detection of high-risk, high-touch areas, combined with other preventative measures," the researchers add. "New generations of large, small, micro-, and swarm robots that are able to continuously work and clean (i.e., not only removing dust but also truly sanitizing/sterilizing all surfaces) could be developed."



In terms of telepresence, "the deployment of social robots can present unique opportunities for continued social interactions and adherence to treatment regimes without fear of spreading more disease," researchers write. "However, this is a challenging area of development because social interactions require building and maintaining complex models of people, including their knowledge, beliefs, emotions, as well as the context and environment of interaction." "COVID-19 may become the tipping point

of how future organizations operate,” researchers add. “Rather than cancelling large international exhibitions and conferences, new forms of gathering – virtual rather than in-person attendance – may increase. Virtual attendees may become accustomed to remote engagement via a variety of local robotic avatars and controls.” “Overall, the impact of COVID-19 may drive sustained research in robotics to address risks of infectious diseases,” researchers go on. “Without a sustainable approach to research and evaluation, history will repeat itself, and technology robots will not be ready ready to assist for the next incident.”

New Computer Program Can Predict How Things Will Move

Just Like Us

Neeti Gahlot

To some extent, we humans are pretty good at predicting the future. Not the big stuff of course, but small things, like how something will move under different forces and conditions. Now, researchers are trying to give computers that same ability.

Let's say you have a heavy block and a rubber ball sitting at the top of a steep ramp, with you holding each one in place. What happens if you just let go (no pushing allowed)?

We can predict that if you let go of the block, it's probably not going to move down the hill as fast as

the ball, if it moves at all. You know that round things roll, and things with edges generally don't. Even though physics governs the actions of the two objects, you don't have to have a physics background to make the guess, you just know. How do you know? Because as a kid, you probably played with blocks and balls and ramps. All your experiences helped you make that prediction in a split second.

But computers generally aren't sent outside to play, so they don't learn how objects interact with the world. Until now. A group of scientists at MIT's Computer Science and Artificial Intelligence Lab (CSAIL) have developed a computer model called Galileo that is able to watch videos of different objects interacting in various situations (like a block sliding down a ramp to crash into something else) to estimate how heavy the objects are, and predict what they'll do in other situations.

"From a ramp scenario, for example, Galileo can infer the density of an object and then predict if it can float," postdoctoral researcher Ilker Yildirim, co-author of the research, said in a statement. "This is just the first step in imbuing computers with a deeper understanding of dynamic scenes as they unfold."



Yildirim and his co-authors first showed Galileo 150 videos before adding some human intuition. Or, rather, computer intuition. They linked Galileo with Bullet, computer software used by video games and movies as a 'physics engine' capable of making animated graphics

look incredibly real by simulating how physics works in the real world. Then they added algorithms that allowed Galileo to learn from its previous experiences, just like humans, and tested it against people, having both the computer and humans predict how an object would move during experiments. They found that humans and the computer had very similar predictions.

You can test how you compare to Galileo using this website created by CSAIL. After watching a short clip of an object sliding down a ramp to hit a block, click on the object that you think is heavier. You can check and see if your answer is correct, and whether Galileo managed to guess correctly.

Next, the researchers want to go even further, working with Galileo on more complicated predictions involving fluids or springs, and eventually getting to a point where it can make predictions in the natural world even faster than we can.

“Imagine a robot that can readily adapt to an extreme physical event like a tornado or an earthquake,” co-author Joseph Lim said. “Ultimately, our goal is to create flexible models that can assist humans in settings like that, where there is significant uncertainty.”

Ethical Hacking

Shiwani singh 18570052

B.Sc.(H) Computer Science 2nd year

Ethical Hacking

The Certified Ethical Hacker (C|EH) credentialing and training program provided by EC-Council is a respected and trusted ethical hacking program in the industry. Since the inception of Certified Ethical Hacker in 2003, the credential has become one of the best options for industries and companies across the world. The C|EH exam is ANSI 17024 compliant, adding value and credibility to credential members. It is also listed as a baseline certification in the US Department of Defense (DoD) Directive 8570 and is a GCT (GCHQ Certified Training).



Hackers working with some of the finest and largest companies across industries like healthcare, financial, government, energy and much more!

Importance of ethical hacking

In the dawn of international conflicts, terrorist organizations funding cybercriminals to breach security systems, either to compromise national security features or to extort huge amounts by injecting malware and denying access. Resulting in the steady rise of cyber crime. Organizations face the challenge of updating hack-preventing tactics,

installing several technologies to protect the system before falling victim to the hacker. New worms, malware, viruses, and ransom ware are multiplying every day and is creating a need for ethical hacking services to safeguard the networks of businesses, government agencies .

How Bill Gates' 1997 house set the stage for modern smart technology

Bill Gates' house was ahead of its time in the mid'-90s

Somiya Bhardwaj

Bsc Physical science 2nd year

In 1995's *The Road Ahead*, Bill Gates gave some details about how his futuristic home. Located on Lake Washington outside of Seattle in Medina, the gadgets inside the 66,000-square-foot compound (which was completed in 1997) sounded like sheer wizardry 20 years ago, but mere mortals can now afford some of the technology Gates boasted about — though the seven bedrooms, 24 bathrooms, and six kitchens are still likely out of reach. "He wished the technology to be as invisible as possible," architect Peter Bohlin, who designed the compound, along with James Cutler, told Philly.com in 1995. "He and his wife wanted the spaces to be even more domestic. He intends to make it high-tech, but by magic. It's invisible." Even



the outlets are hidden, according to U.S. News & World Report.

The house was outfitted with fiber optic cables and each room has its own touch pad to control lighting, music, and temperature. "First thing, as you come in, you'll be presented with an electronic pin to clip to your clothes. This pin will connect you to the electronic services of the house," Gates wrote in *The Road Ahead*. "The electronic pin you wear will tell the house who and where you are, and the house will use this information to try to meet and even anticipate your needs — all as unobtrusively as possible." At the time, Gates speculated cameras might one day supplant the pins, as they'd be able to do facial recognition. He explained that the house would learn your preferences and adjust to your needs. A handheld remote helped you choose your settings,

and while there's no shortage of smart-home remotes today, it's possible phones have replaced them in the Gates home. If you want the ability to adjust your artwork with the touch of a button or swipe of your hand, lots of digital frames can make your

home a little more Gates-esque. "A decade from now," Gates wrote in his book, "access to the millions of images and all the other entertainment opportunities I've described will be available in many homes and will certainly be more impressive than those I'll have when I move into my house in late 1996. My house will just be getting some of the services a little sooner."

Cybercriminals actively targeting work-from-home Employees

Shraddha Paliwal 18570002

B.Sc.(H) Computer Science 2nd year

In the wake of the COVID-19 global epidemic, organizations are forced to switch to Work From Home (WFH) strategies to keep their businesses running. And although this is not a new trend, especially in the IT industry, this time it is much different in terms of the scope and intensity.

What is different now: In majority organizations, almost the entire workforce is now depending on the remote connectivity (using VPNs). Using publicly available communication or collaboration channels makes these employees and their connected networks prone to cyberattacks. In many organizations, the infrastructure was never tested for such a massive level of the remote working scenario. And cybercriminals are leaving no stone unturned to exploit the loopholes to satisfy their malicious intents.

Why is it a big challenge: According to a recent ThreatPost survey, around 70% of organizations are experiencing this remote working culture for the first time. Thus, the security teams can be expected to find it challenging to cope with the new challenges such as handling the massive flood of device

connections, managing secure access to company resources, protecting the sensitive data, patching and securing endpoints, etc., thereby leaving them vulnerable to attacks.

Moreover, a 40% increase has been observed in the cyberattacks on personal computers, routers, VPNs, routers of those companies, that have allowed their employees to work from home.

The attacker's strategy: Attackers are fond of using the following tactics to lure their victims:

The same ThreatPost Survey also suggests that Social engineering and phishing are turning out to be a major threat, accounting for 23% of attacks, followed by various other threats like Business Email Compromise (BEC) and ransomware attacks.

Cybercriminals were found using spam emails and fake apps related to Coronavirus to lure their victims. For instance, the emails claim to contain important updates or urge users to make donations while posing as trustworthy organizations like the World Health Organization.

Several cybercriminals have revamped and customized their malware (such as Trickbot, Emotet, and Lokibot to name a few) so that it could be used to take advantage of this global epidemic situation.

Who are the targets: Reports suggest that cybercriminals have been actively targeting organizations in healthcare, pharmaceuticals and manufacturing sectors, although other sectors like



education, IT and Oil & Gas are also getting hit. In addition, there has been an aggressive increase in the exploitation of popular collaboration and communication products which are getting popular due to the remote working culture, not only for IT but several other sectors as well.

What can be done: Organizations need to make sure that all their employees and infrastructure are protected using basic security essentials, like the use of encryption for sensitive data, strong passwords for access to corporate resources and having genuine anti-malware and firewalls installed. And on top of it, they must make sure that their employees are aware of the common security hygiene while working remotely.

The UK National Cyber Security Center (NCSC) recommends organizations to look out for more SaaS options, and preparing 'How do I?' series guidelines for their employees.

The US National Institute of Standards and Technology (NIST) suggests organizations to plan and develop dedicated security policies for remote working, that would cover the telework, remote access, and BYOD requirements, and mitigate the risks from hostile threats in the external environments.

Cybersecurity and Infrastructure Agency (CISA) recommends organizations to have well-defined network rules, implement multifactor authentication for all employees, and have a proper incident reporting mechanism to effectively deal with any incident.

COMPUTER SCIENCE AND FITNESS

ANANYA SINGHAL

Computer science in sports and fitness is an interdisciplinary discipline that has its goal in combining the theoretical as well as practical aspects and methods of the areas of informatics and sport science. The main emphasis of the interdisciplinarity is placed on the application and use of computer-based but also mathematical techniques in sport science, aiming in this way at the support and advancement of theory and practice in sports. The reason why computer science has become an important partner for sport science is mainly connected with the fact that "the use of data and media, the design of models, the analysis of systems etc. increasingly requires the support of suitable tools and concepts which are developed and available in computer science".

Today, personalized health technologies generate large amounts of data. Emerging computer science techniques, such as machine learning, present an opportunity to extract insights from these data that could help identify high-risk individuals and tailor health interventions and recommendations. As these technologies play a larger role in health promotion, collaboration between the public health and technology communities will become the norm. Offering public health trainees coursework in computer science alongside traditional public health disciplines will facilitate this evolution, improving public health's capacity to harness these technologies to improve

population health. Advances in information technology have spurred an evolution in our capacity to collect crucial information quickly, remotely, reliably, and cheaply. These technologies allow for the continuous real-time collection and analysis of health-related data. Both Google Search data and Twitter data have provided insights into disease surveillance and other “digital epidemiology” research questions. Over the last few decades, the digital revolution has fueled technological progress and innovation. It is becoming clear that mobile devices will play a growing role in the process.

Smartphone penetration has surpassed personal computers. Health apps are particularly popular. According to researches, there are over 1,00,000 health, fitness, and medical mobile apps, with the majority focusing on preventive areas such as healthy living, diet and exercise, addiction, stress, hydration and relaxation, and sleep. Along with the growing presence of wearable technologies (eg, fitness trackers and smartwatches), these apps are contributing to a surge in the availability of health-related data. These apps collect tremendous information flows, in real time, and have the capacity to interact with the user, enabling changes in user behavior in response to user data. These apps automatically translates behavioral data into personalized suggestions that promote healthier lifestyle without any human involvement.

One example of the potential for computational techniques to improve public health is machine learning. This methodological approach has emerged as a means of making sense of increasingly complex,

high-volume big data such as those emerging from apps. Although machine learning methods present an opportunity for public health, there are challenges and limitations to consider. Machine learning includes many different methods—regression, decision trees, neural networks, clustering, network analysis—that are more broadly categorized as either supervised or unsupervised learning. Although the field has existed for over half a century, recent progress has allowed for the development of real-world applications, including Google News clustering, Amazon product recommendations, and Facebook photo recognition.

In the context of public health, computational methods such as machine learning could be used for both predictive and explanatory modeling, that is, identifying which individuals will benefit from an intervention, and better understanding the relationship between different exposures and health outcomes. In the realm of predictive modeling, machine learning could integrate data from a diverse set of sources—electronic health records, genomic sequencing, claims data, mobile sensors, and even social media—to better predict individuals at high risk for specific health conditions. Continually incorporating new data with minimal supervision will likely reduce the time and costs typically associated with building these insights. Once individuals have been identified, interventions and recommendations can be tailored based on personal preferences and feedback. Machine learning allows algorithms to continuously update so they become smarter and more personalized the more they are used. This data-driven approach is an improvement over traditional approaches in which individuals are stratified according to characteristics such as age, sex,

and biomarkers to predict risk and recommend interventions.

Distinct from medicine and health care, public health focuses on promoting health and preventing disease at the population level. While a deep knowledge of biological and life sciences forms the core of medical training, public health requires a more comprehensive set of skills, including biology and life sciences, social sciences, public policy, and statistical reasoning. The incorporation of computer science into public health training is perhaps more critical than the adoption of public health as a focus for computer science: the role of well-trained public health professionals is essential to foster dialogue on important issues such as the methodological limitations and ethical implications of big data for health.

Result Analysis Computer Science- 2018-19

Year-wise results of students at UG: Based on 2018-19 results

UG/PG	Year	Appear ed	Passed	Pass %	Grade %						
UG					O	A+	A	B+	B	C	D
B.Sc(H) CS	I	33	33	100	0.0	30.3	36.4	21.2	12.1	0.0	0.0
	II	41	41	100	2.4	22.0	19.5	29.3	19.5	7.3	0.0
	III	47	47	100	4.3	19.1	21.3	34.0	12.8	8.5	0
PS	III	44	44	100	9.09 % (4)	20.45 % (9)	29.54 % (13)	27.27 % (12)	11.36 % (5)	2.27 % 1	0

Only for Computer Science Papers

Name of the Program	Course	Semester	Appeared	Passed	Pass %	Grade %			
						A	B	C	D
UG	B.Sc. (PS)	I	51	51	100	29.41	62.74	3.92	3.92
		II	51	51	100	27.45	58.82	11.76	1.96
		III	40 (C)	40	100	32.50	47.50	15	5
			14 (S)	14	100	92.85	7.14	0	0
		IV	40 (C)	40	100	67.50	22.50	7.50	2.50
			14 (S)	14	100	100	0	0	0
		V	44 (c)	44	100	54.54	43.18	0	2.27
			16 (S)	16	100	100	0	0	0
		VI	44 (C)	44	100	36.36	50	13.63	0
			16(S)	15	93.75	93.75	0	0	0

Name of the Program	Course	Year/Sem	Appeared	Passed	Pass %	Grade %			
						A	B	C	D
UG	B.A(P) Ist Year	I	38	38	100	23	69	5	3
		II	38	37	97	13	53	26	5
		III DSE	19	19	100	26	58	5	11
	IIInd Year	SEC	10	10	100	60	40	0	0

		IV DSE	19	19	100	26	32	32	10
		SEC	10	10	100	70	30	0	0
	IIIrd Year	V DSE	12	12	100	42	42	8	8
		SEC	8	8	100	100	0	0	0
		VI DSE	12	12	100	58	42	0	0
		SEC	8	8	100	100	0	0	0

Course	Name of Students	Roll No.
Highest Marks in Comp. Sc in B.Sc PS Sem I & II	SONIA TIWARI	18033582031
	SOMIYA BHARDWAJ	18033582013
	SHRIYASTI SHAH	18033582014
	NEHA	18033582022
Highest Marks in Comp. Appln. in B. A. (Prog) Sem I & II	HIMANI	18033501160
	VANDANA CHAUDHARY	18033501156
Highest Marks in B. Sc (H) Comp. ScSem I & II	YUTHIKA PANT	18033570008
First in B. Sc. (H) Comp. Scsem I and II Combined	YUTHIKA PANT	18033570008
Second in B. Sc. (H) Comp. Scsem I and II Combined	SHREYA THAPLIYAL	18033570004
First in B. Sc. (H) Comp. Scsem III and IV Combined	Rekha	17033570009
Second in B. Sc. (H) Comp. Scsem III and IV Combined	Kanika Tyagi	17033570033
First in B. Sc. (H) Comp. Sc sem V and VI Combined	Deepanshi Makkar	16033570006
	Shalini Sharma	16033570011
Second in B. Sc. (H) Comp. Sc sem V and VI Combined	Priyanka Jaswal	16033570016
	Aarushi	16033570030
First in B.Sc. PS Sem I and II	shriyati singh	18033582014
Second in B. Sc. PS Sem I and II	soniya tiwari	18033582031
First in B.Sc. PS Sem III and IV	Ayushi Sharma	17033582040
Second in B. Sc. PS Sem III and IV	Parisha	17033582017
First in B.Sc. PS Sem V and VI	Deepika	16033582001

Second in B. Sc. PS Sem V and VI	Kajal	16033582042
First in B. A. (Prog.) Computer AplSem I and II	VANDANA CHAUDHARY	18033501156
	HIMANI	18033501160
Second in B. A. (Prog.) Computer AplSem I and II	AALIYA FATIMA	18033501162
First in B. A. (Prog) Computer AplSem III & IV	NIDHI SINGH	17033501018
	DIVYA YADAV	17033501125
	TEENA	17033501135
Second in B. A. (Prog) Computer AplSem III & IV	PRATIMA KUMARI	17033501145
	MEHAK DENDONA	17033501186
First in B. A. (Prog) Computer AplSem V & VI	Dipika	16033501081
	Nishtha	16033501143
Second in B. A. (Prog) Computer AplSem V & VI	Neha	16033501142
First in B. Sc. (H) Comp. Sc part 1	YUTHIKA PANT	18033570008
Second in B. Sc. (H) Comp. Sc part 1	SHREYA THAPLIYAL	18033570004
First in B. Sc. (H) Comp. Sc part 2	Rekha	17033570009
Second in B.Sc.(H) Comp. Sc part 2	Kanika Tyagi	17033570033
First in B. Sc. (H) Comp. Sc part 3	Deepanshi Makkar	16033570006
	Shalini Sharma	16033570011
Second in B.Sc.(H) Comp. Sc part 3	Priyanka Jaswal	16033570016
	Aarushi	16033570030

The Department of Computer Science of the Kalindi College takes subjects for three courses- B.A(P) Computer Application, B.Sc(P) Physical Science, B.Sc(H) Computer Science, and Computer Generic subjects of the other departments of the Kalindi College.

The list of activities hosted by the Department of Computer Science of the Kalindi College during the academic year 2019-2020 are given below:

S.NO.	ACTIVITY	Date	Venue
1	Career Counselling Seminar – UNIQUE SHIKSHA	July 30, 2019	Sangam Parisar
2	National Conference on Emerging Trends on Information Technology	August 1-2, 2019	Seminar Room & Computer Science lab
3	Sexual Harassment Awareness Workshop	September 11, 2019	Computer Science lab
4	Career Counselling Seminar – LANDMARK	September 19, 2019	Seminar Room
5	Cyber Security Workshop	September 21, 2019	Computer Science lab
6	Poster Making Competition – PIXEL 0.1	September 26, 2019	Room No. AB21
7	PowerPoint Presentation Competition – PIXEL 0.2	September 26, 2019	Computer Science lab
8	Inter-College Technical Fest – ASTRODROID 2.0	September 30, 2019	Computer Science lab

9	Anti-Ragging and Grievance Redressal Awareness Workshop	October 23, 2019	Computer Science lab
10	Sacred Quiz Competition – PIXEL 0.3	October 24, 2019	Computer Science lab
11	Cambridge English Workshop	November 5, 2019	Computer Science lab
12	Data Analytics Workshop	November 5, 2019	Computer Science lab
13	Mind Scribbles (Online Quiz Competition)- PIXEL 0.4	November 7, 2019	Internet
14	Data Analytics Workshop	January 20, 2020	Computer Science Lab
15	DirectyourRobot Competition – PIXEL 0.5	January 27, 2020	Computer Science Lab
16	Orphanage Visit - Katyayani Nirashrit Balika Ashram	February 23, 2020	Jhandewale, Delhi
17	Career Counselling Seminar – AMITY Institute of Competitive Examination	March 6, 2020	Computer Science Lab
18	Student Webinar - Managing Psychological Lockdown	May 6, 2020	Internet

:Career Counselling Session

(Know how to become an IAS/IPS officer)

July 30 , 2019

In collaboration with Unique Shiksha

The career counseling seminar on 'Know how to become an IAS/IPS Officer' was conducted by the department of the Computer Science, Kalindi College in collaboration with 'Unique Shiksha' on July 30, 2019 for an hour in Sangam Parisar.

The session was conducted by Mr. Shashi Shekar and Mr. Suman Chandra. He has done his graduation and masters from Delhi University. He is mentoring for IAS examination for the last 8 years. He has vast experience regarding giving guidance to students in various reputed organization. As of now he is working as Academic Head in Unique Shiksha.

They explained the main concerns of the students, how civil services acts as the backbone of the administrative machinery of the country and the broad career prospect in this field. They also threw

light on the methodology that must be adopted by students in order to clear civil services examination. All students were very enthusiastic and participated with great zeal in the session.



The seminar had a huge participation of students. Around 129 students belonging to various courses such as B.Sc(P) Physical Sciences, B.Sc(Hons.) Computer Science, B.A. Programme and B.A.(Hons.) were benefitted by this seminar.

Career Counselling Session

(Know how to Crack Entrance Examination of MCA)

September 19 , 2019

In collaboration with LandMark Institute

The career counseling seminar on 'Know how to crack entrance examination of MCA' was conducted at 2:00 PM by the department of the Computer Science, Kalindi College in collaboration with Landmark institute on September 19, 2019 for an hour in

Seminar Room,
Administrative Block, Kalindi
College.

The session was conducted by Prof. R. Chadha. He is mentoring students for MCA entrance examination for the past few years. He has vast experience regarding giving guidance to students in various

reputed organization. As of now he is working as Director in Landmark Institute of the West Patel Nagar, Delhi.

He started the session by introducing various career options in Information Technology. He explained various upcoming fields in IT such as Artificial

Intelligence, Data Analytics and Data Sciences, Web Development, and Cyber Security experts. He also explained the basic eligibility for each career options which requires special skills. Finally, he informed the top rank colleges for Masters in Computer Application in various universities within India as well as renowned foreign universities available in other countries other than India.

At the end, the students raised some queries which were resolved by the speaker with the appropriate suggestions and options. They also threw light on the methodology that must be adopted by students in order to clear entrance examination of higher studies. All students were very enthusiastic and participated with great zeal in the session. The seminar had a huge participation of 110 students belonging to various courses such as B.Sc Physical Science and B.Sc(H) Computer Science.

Career Counselling Session

In collaboration with Amity Institute of Competitive Examination

The career counseling seminar on 'Know how to crack competitive examination' was conducted by the department of the Computer Science, Kalindi College in collaboration with 'Amity Institute of Competitive Examination' on March 6, 2020 for an hour in Computer Science Lab 1, 2nd floor, Department of Computer Science, Academic Block, Kalindi College. The session was conducted by Jyoti Saxena and Kamal Bhalla who is the. The session was started by

Jyoti emphasizing on the importance of gaining aptitude skills, not only to crack the competitive examination for higher studies, but also to crack the aptitude tests for job. The Amity institute of Competitive Examination is known for mentoring the students of Amity University to crack the competitive examination such as CAT/GMAT/GRE. As of now she is working as Programming Head in the Amity institute of Competitive Examination. Kamal Bhalla explained the main concerns of the students, the question pattern of CAT/GMAT/GRE examination how the cracking of competitive exam leads to the opportunity of studying in Ivy League colleges in India and countries other than India. They also threw light on the methodology that must be adopted by students in order to clear CAT/GMAT/GRE examination. All students were very enthusiastic and participated with great zeal in the session.

He has vast experience regarding giving guidance to students in various reputed organization. As of now he is working as Faculty of Quantitative Aptitude & Logical Reasoning in the Amity institute of Competitive Examination.

The seminar had a huge participation of students. Around 30 students belonging to various courses were benefitted by this seminar.

@strodroid 2.0 2019-20

(Inter-College Tech Fest)

INAUGURATION

The inter-college technical fest of PhysCom Society, @strodroid 2.0 2019-20 was organized by the Convenor, Ms. Shalini Sharma, Co Convenor Dr. Reena Jain & Ms. Arokia Ramya and student bearers of PhysCom society, Kalindi College. The ceremony took place in Computer lab 1, Computer Science Department, 2nd floor, Academic block, Kalindi College. The ceremony started with the giving away of gift hampers and certificates to the previous year student bearers of PhysCom society. A poem was recited by Sudha who is 3rd year student of B.sc (H) computer science. The poem left the audience teary eyed. The audience consists of teachers and students of Kalindi College.



TAMBOLA

An inter-college competition "TAMBOLA" was organized by PhysCom Society in lab room 3, Computer Science Department, second floor,

Academic block, Kalindi college as a part of annual fest '@strodroid 2.0 2019-20' at 9:30am-10:30am on 30th September 2019. The competition was coordinated by Shalini Sharma, Anshula and Kanishka.

It was a single round competition. The tambola tickets were distributed to students. The numbers with different expressions were displayed on the projector screen. The number was pulled out at random and the corresponding ASCII value or expression was called out, the participant had to see the value from the screen and crossed the number related to it on their tickets. The first person to have all his/her number crossed (full house) secured the top position. The first person to have all his/her numbers crossed in top row, middle row or last row secured second position. The first person to have the ticket with all four corners marked first i.e. first and last numbers of top and bottom rows secured third position.

About 49 students participated in the competition. The students from Kalindi College as well as Shivaji college participated in the competition. The refreshment coupons were given to all the participants.

The result of the competition is as follows:

1. Sakshi Gupta, B.Sc(H) Physics, 2nd year, Kalindi College – First Full House
2. Akshita Tak, BVoc(Web Designing), 1st year, Kalindi College -- Second Full House

3. Samreen Faiyaz , B.Sc (H) Computer Science,1st year,
Kalindi College —Second Full House

4. Mahima Pal , B.Sc (H) Computer Science,1st year,
Kalindi College --First Row

5. Deepika Chauhan, B.Sc (H) Computer Science,1st year,
Kalindi College --First Row

6. Vandana , BVoc(Web Designing),3rd year,, Kalindi
College – Second Row

7. Medha Sharma , B.Sc Physical Science, 2nd year,
Kalindi College – Third Row

8. Pragya Gambhir , B.Sc (H) Computer Science,3rd year,
Kalindi College —Four Corners

9. Srishti Thakur, BVoc(Web Designing),3rd year , Kalindi
College —Four Corners

10. Siddhi Gupta, B.Sc (H) Computer Science,1st year,
Kalindi College —Four Corners

The winners were awarded with certificate and prize money of Rs 600 for first position, Rs 400 for second position and consolation prize as Rs. 250 for rest positions.

WebG

An inter-college competition "WebG" was conducted by PhysCom Society in Computer lab 2, Computer Science Department, 2nd floor, Academic block, Kalindi college as a part of annual fest '@strodroid 2.0 2019-20' at 10:30am-11:30am on 30th September 2019. The event was coordinated by Dr. Sushil Malik, Mr.Yogendra and Dr. Diksha Grover. The judges were Mr. Yogendra and Dr. Sushil Malik. The competition was conducted in two rounds

1. First round (Qualifying round)

2. Second round (Final round)

In the first round, there were 21 students participated from various colleges. The participants were given 30 multiple choice questions related to HTML and web designing which they had to solve within 15 minutes. From first round, 15 students were selected. The qualified students were given the task of designing a webpage for the dream college and the winners was declared on the basis of the criteria such as presentation, creativity, content and the number of hyperlinks set by the judges.

There were 4 Students from different colleges namely Lal Bahadur Shastri Institute of Management and PGDAV college participated in the competition. The refreshment coupons were given to all the participants of the second round of the event.

The result of the competition was

1. Mansi Mittal, B.Sc(H) Computer Science, 3rd year,
Kalindi College

2. Pulkit Khandelwal, B.Sc(H) Computer Science, 3rd year, PGDAV College

3. Mayank Singh, B.Sc(H) Computer Science, 3rd year ,PGDAV College

The winners were awarded with certificate and prize money of Rs 3000 for first position, Rs 2000 for second position and 1000 for third position respectively.

BLACKBOX

An inter-college competition "BLACKBOX" was conducted by PhysCom Society in Computer lab 2 and 3 ,Computer Science Department, 2nd floor, Academic block, Kalindi college as a part of annual inter-college fest '@strodroid 2.0 2019-20' at 11:30 am-1:00 pm on 30th September 2019.

The event was coordinated by Ms. Shalini Sharma, Ms. Neha Singh, Ms. Rajini and Dr. Diksha Grover. The judges were Dr.Diksha Grover and Ms Neha Singh.

The competition was conducted in two rounds:

1. First round (Qualifying round)
2. Second round (Final round)

In the first round, students were given multiple choice questions based on coding which they had to complete in 30 minutes. From the first round, the first 20 students were selected. In the second round, 4 questions were given to create the code within 1 hour and 30 minutes in which input and output was given. The programming language used in the competition is C++ and Java. There were 47 students registered in BlackBox event. About 27 students were participated from different college namely ABES Engineering College – Ghaziabad, PGDAV College, Bhagwan Parshuram Institute of Technolgy, Maharaja Agaresen Institute of Technology, Maharaja Agaresen College and College of Vocational Studies. The refreshment

coupons were given to all the participants of the second round of the event.

The result of the competition is as follows:

1. Kartikeya, Bsc (H) Computer Science, 3rd year, PGDAV College
2. Sarthak Jain, Btech CSE, 3rd year, BPIT College
3. Vaishnavi Jaiswal, B.Sc (H) Statistics, 2nd year, PGDAV College

The winners were awarded certificate and prize money of Rs 3000 for first position, Rs 2000

for second position and 1000 for third position respectively.

QUIZILADDER

An inter-college competition " QUIZILADDER" was conducted by PhysCom Society in Computerlab 1 , lab 2 and Room no 21, Computer Science Department, 2nd floor, Academic block, Kalindi college as a part of annual fest '@strodroid 2.0 2019-20' at 1:30 pm-3:00 pm on 30th September 2019. The event was coordinated by Ms Anshula, Ms. Kanishka and Dr. Sushil Malik.

The competition was conducted in two rounds:

1. First round (Qualifying round)
2. Second round (Final round)

The first round was a pen and paper round in which 25 general knowledge questions were asked which

had to be solved within 20 minutes. From the first round, the first 8 students were selected who were further paired up in 4 teams randomly through lucky draw. In the second round, each team was given a chance to roll the dice and a question was asked after every roll. The team is to step ahead according to number on dice on the board in case of correct answer, no movement in case of pass and step backward in case of wrong answer. The team was also allowed to pass the question in case they didn't know the answer and the team which answered the passed-on-question was rewarded 1 step further on the board. The team who was standing at the highest number at the end was declared as winner. The refreshment coupons were given to all the participants of the second round of the event. In the first round, there were 57 students participated in the Quiziladder event. There were 18 students from different colleges namely PGDAV college, Keshav Mahavidhyala college, Ramanujan College, College of Vocational Studies, ABES Engineering College, Rajdhani College and Bhagwan Parshuram Institute of technology participated in the competition.

The result of the competition is as follows

1. Saurabh Shantilya, Mathematical Science, 2nd year, PGDAV College and Priyanshi Singh, , BVoc(Web Designing), 3rd year, Kalindi College
2. Laveena, B.Sc Physical Science, 3rd year, Kalindi college and Shaifali, B.Sc(H) Computer Science, 2nd year, Kalindi College

The winners were awarded certificates and prize money of Rs 1500 for the first position and Rs 1000 for second position respectively.

DECODE N HUNT

An inter-college competition " DECODE N HUNT" was conducted by PhysCom Society in Computer lab 1 and lab 3, Computer Science Department, 2nd floor, Academic block, Kalindi college as a part of annual fest '@strodroid 2.0 2019-20' at 1:30pm-3:00 pm on 30th September .The event was coordinated by Ms Sweety Kataria,Mr. Yogendra,Ms Neha Singh and Ms Rajini.

The competition was conducted in two rounds:

1. First round (Qualifying round)
2. Second round (Final round)

The students participated in the groups of 4 people. In the first round, one of the team members was asked to solve 15 multiple choice questions based on general knowledge of computer. In second round, teams were given 4 codes which they had to decode which on solving will give them name of an object which were present in the college campus. The team which was able to find the object and click a picture with it in the shortest time and once approved by the coordinator, the team was given the next code to decode. The team which completed every task in minimum time was declared winner. In the first round, there were 33 teams participated in the event. In the second round, ten teams were selected from the first round. There

were 24 students from different colleges namely Dyal Singh College, PGDAV College and Maharaja Agarsen Institute of Technology participated in the competition. The refreshment coupons were given to all the participants of the second round of the event. The winner team was awarded with the certificates and prize money of 3000 respectively.

The result of the competition is as follows:

Samridhi Rana, BVoc(Web Designing), 2nd year
Kalindi College

Aastha Bakhshi, BVoc(Web Designing), 2nd year
Kalindi College

Shreya Gupta, BVoc(Web Designing), 2nd year
Kalindi College

Anjali Rawat, BVoc(Web Designing), 2nd year
Kalindi College

ORPHANAGE VISIT

Organized by
PhysCom Society, Kalindi College
University Of Delhi

As a part of social activities organized by the PhysCom Society, the team of Physcom society visited Katyayani Nirashrit Balika Ashram , an orphanage in Jhandewala on 23 February,2020.

Katyayani Nirashrit Balika Ashram is an orphanage located at Jhandewala, Central Ridge Reserve Forest, New Delhi. There are more than 70 orphan girls of age between 7 and 16 years living in the orphanage

The collection drive for clothes and cash was organized by the PhysCom team in Kalindi college premises before the visit to orphanage. Some notebooks, clothes and cash worth Rs.4500 were collected. The daily usage items such as cooking oil, toothpaste and soaps were purchased from collected amount and were given to the orphanage. The chocolates, toffees, biscuit, burger and cold drink for children were also distributed to the children at the end.

A talent hunt competition was organized by the team in which the children participated happily and showcased their skills such as singing, dancing etc. Some of the team members were also performed.



TEAM COMPUTER SCIENCE



**COMPUTER SCIENCE DEPARTMENT
KALINDI COLLEGE
(UNIVERSITY OF DELHI)
EAST PATEL NAGAR, NEW
DELHI-110008**