INDERPRASTHA ENGINEERING COLLEGE
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Association for Computing MAchinery

SPECTRUM

" It has become appallingly obvious that our technology has exceeded our humanity. "

- Albert Einstein (Scientist)

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MESSAGES

DIRECTOR's MESSAGE

It gives me immense pleasure in presenting you the creative efforts of students and faculties of Computer Science Engineering & Information Technology department who have contributed to bring out the "IPEC ACM STUDENT CHAPTER" . The Inderprastha Engineering College (I.P.E.C.) has grown and continues to retain its growth in various fields. The college has always been thriving to deliver quality education together with their active participation in extracurricular activities to hone their unrecognized skills. I congratulate the editorial team for their hard work and commitment that has resulted into the publication of the this issue of this newsletter.

- Dr. B. C. Sharma

HOD's MESSAGE (CSE)

I am delighted to bring out the message that our Department of Computer Science Engineering & Information Technology department at IPEC has embarked on a new venture of publishing newsletter of "IPEC ACM STUDENT CHAPTER".

The Newsletter has briefed up the achievements of IPEC ACM CHAPTER such as: seminars, workshops, tasks ,learning ,events attended by students and faculties, various achievements which embodies the efforts of department and college to make it a center of excellence in education and research. I wish success to all the contributors for their untiring efforts .

- Dr. Rekha Kashyap

MESSAGES

HOD's MESSAGE (IT)

The Pride of every student and staff would be in his/her college. A college may reach heights of glory but without materials like a college newsletter, the outside world may not know of it. The role of college newsletter is therefore, vital in promoting what an institution offers. This newsletter has recorded achievements won by the hugely talented students with the guidance of faculty, among others. They stand as a witness to the monumental efforts taken by management to make the college a center of excellence in education and research. I congratulate and thanks all the students and faculty coordinators who have made untiring efforts to bring out this newsletter.

- Dr. POOJA TRIPATHI

ACM CONVENER's MESSAGE

It gives me an immense pleasure to pen a few words as faculty coordinator of IPEC ACM Student chapter. In today's world, when technology is changing at a very fast pace and blooming like a flower in every phase of life, it is becoming a requirement for every engineer to update themselves to match the race of technology. I congratulate our student chapter for giving a wonderful platform to the future engineers to share and acquire knowledge. The various SIGs are the learning groups that are made by the students , for the students, which help them to discuss, judge, question, test their knowledge in various fields. This newsletter will be a snapshot of all the activities related to IPEC ACM student Chapter. I feel proud to be a part of this chapter. As ACM Student chapter started in 2016, it is still embryonic in nature, I wish my students good luck for future. You all will surely take this chapter to heights of success.

- Ms. Alka Singhal

EDITOR'S DESK

A thought that has been enduring in mind when it becomes real is truly an interesting and exciting experience. It would be snapshot of the various activities ,events ,workshops and advancements for all associated with IPEC ACM STUDENT CHAPTER. Proper communication plays a vital role in institutional development . This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us.

The progress of the society is mainly depends on many people who are working behind the scenes, overtime round the clock planning things to the smallest. This newsletter will be a medium to provide proper acknowledgement and respect all of these efforts and its results. This is only a small step towards a long journey.

Members of Editorial Board :-

Conveyor:
Damini Rathore (Cse 4th Year)

Editors:
Saurav Gupta (Cse 3rd Year)
Pooja Basak (Cse 3rd Year)

Designed By:
Abhay Jain (Cse 4th Year)

Members:
Shivi Panwar (IT 3rd Year)
Akshay Sachan (Cse 3rd Year)
Shivam Garg (Cse 3rd Year)
Divyansh Singhal (Cse 3rd Year)

VISION

We see a world where computing helps solve tomorrow's problems – where we use our knowledge and skills to advance the profession and make a positive impact.

MISSION

To honour student achievement and leadership in career and technical education, promote educational excellence, award scholarships, and enhance career opportunities for the ACM members.

ABOUT ACM

The Association for Computing Machinery (ACM) is an international learned society for computing.

ACM, the world's largest educational and scientific computing society, delivers resources that advance computing as a science and a profession.

ACM brings together computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. As the world's largest computing society, ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

As a leading global source for scientific information, ACM promotes computer research and innovation through its journals, magazines, and the proceedings of annual conferences and symposia.

ACM also provides access to the ACM Digital Library (DL), a comprehensive and expanding database of literature and detailed bibliographic resources for computing professionals from a wide range of publishers.

ACM is a volunteer-led and member-driven organization. Everything ACM accomplishes is through the efforts of people like you. A wide range of activities keep ACM moving, including organizing conferences, editing journals, reviewing papers and participating on boards and committees, to name just a few.

EVENTS

PAST EVENTS :

Event	Date	Event	Date
Android App Development Workshop	8th April 2016 to 9th April 2016	SIG SOFT	IT SEMINAR HALL AND CSE LAB 1
Inaugural Ceremony	10th August 2016		RAMAN SABHAGAR
Working on Managing resources on Windows OS	30th January 2017	SIG TRICKS	IT SEMINAR HALL

UPCOMING EVENTS :

Event	Date	Event	Date
Workshop Cyber Security	24th August 2017	Query Enquiry	22th September 2017
Hackathon	13th October 2017	Do you love your Language	9th November 2017
Code Partner	25th January 2018	Genius at Basic Coding	16th February 2018

INAUGURAL CEREMONY

Inauguration of the **IPEC ACM Student Chapter** took place at Inderprastha Engineering College on 10 August 2016 at 2pm. The Association for Computing Machinery is an international learned society for computing. It was founded in 1947 and is the world's largest scientific and educational computing society. It is a not-for-profit professional membership group. Dr. Neelima Gupta (Associate professor), Department of Computer Science University of Delhi, ACM Delhi Coordinator) and Mr. Ankush Grover (VP Operations from the start-up 'INNOV-8') were present for the ceremony.

The ceremony was started by our respected Director, Dr. Brijesh Chand Sharma, who motivated the students on how to tackle big challenges in life and achieving their dreams. This was followed by Dr. Neelima Gupta, who delivered a keynote on ACM as well as a session on Design and Analysis of Algorithm. Furthermore, an interactive discussion took place, which was initiated by Mr. Ankush Grover. The ceremony gracefully ended with the CEO's interaction with the startup entrepreneur Ankush Grover in which a questioning round was held regarding his journey to success.

WORKSHOPS ORGANIZED TILL DATE..

ANDROID WORKSHOP

A workshop on **Mobile App Development** was organized by "Department of CS and IT" on 08 and 09 April 2016. The workshop started by 11:00 a.m. in the NEW IT SEMINAR HALL. Around 95 students attended the workshop. The workshop was delivered by Mr. Pradeep Patel (CEO, HOODOO APPS and Alumni IPEC 2004).

Special Thanks to Honourable HOD-IT, Dr. Pooja Tripathi & Mr. Mandeep Singh Katre (Assoc. Prof, CSE) for being the constant Source of Inspiration and Guidance for the student Organisers. We extend our Heartfelt Gratitude to Mr. Aarvind Kumar Yadav & Mr. Pranshu Saxena for guiding us through this workshop.

MAIN POINTS OF DISCUSSION :

Knowledge imparted by the trainer: Speaker Mr. Pradeep Patel conducted the session and gave us the basic knowledge about the apps development, their need and scope.

He described various platforms on which apps are available along with their thorough details of each platform. He enlightened the audience with many motivating achievements and interactive examples.

OBJECTIVE HIGH LIGHTENED:

In his initial words, with great affirmation he mention that, no coding is required or necessary to develop a mobile app. He told us the difference among pure, hybrid and native apps development and their respective merit and demerit. He introduced his app development platform to the audience **HOODOO Apps**, where many great ideas could be implemented via app. He gave brief and nice description about HOODOO Apps and also he created an app to show the audience how easy developing an app is.

CONCLUSION:

Students showed a lot of interest in attending the workshop of "Mobile App Development".

WINDOWS OS WORKSHOP

A workshop was conducted by **SIG TRICKS** on 30 January 2016 for members of IPEC ACM Student Chapter on handling and managing resources on **Windows Operating System**.

The event was conducted under the guidance of :-
Mrs. Pooja Tripathi (HOD IT)
Mrs. Rekha Kashyap (HOD CS)

The aim of the workshop was to make students learn how to troubleshoot the problems such as update failure and coping with critical problems using advanced recovery mode in Windows. The purpose of the workshop was to make students handle their system resources in an efficient manner , which being an IT professional is a basic need.

The Workshop involved topics on Advanced recovery option, folders(sys32,Prefetch,AppData, etc.) and some of the important windows applications.

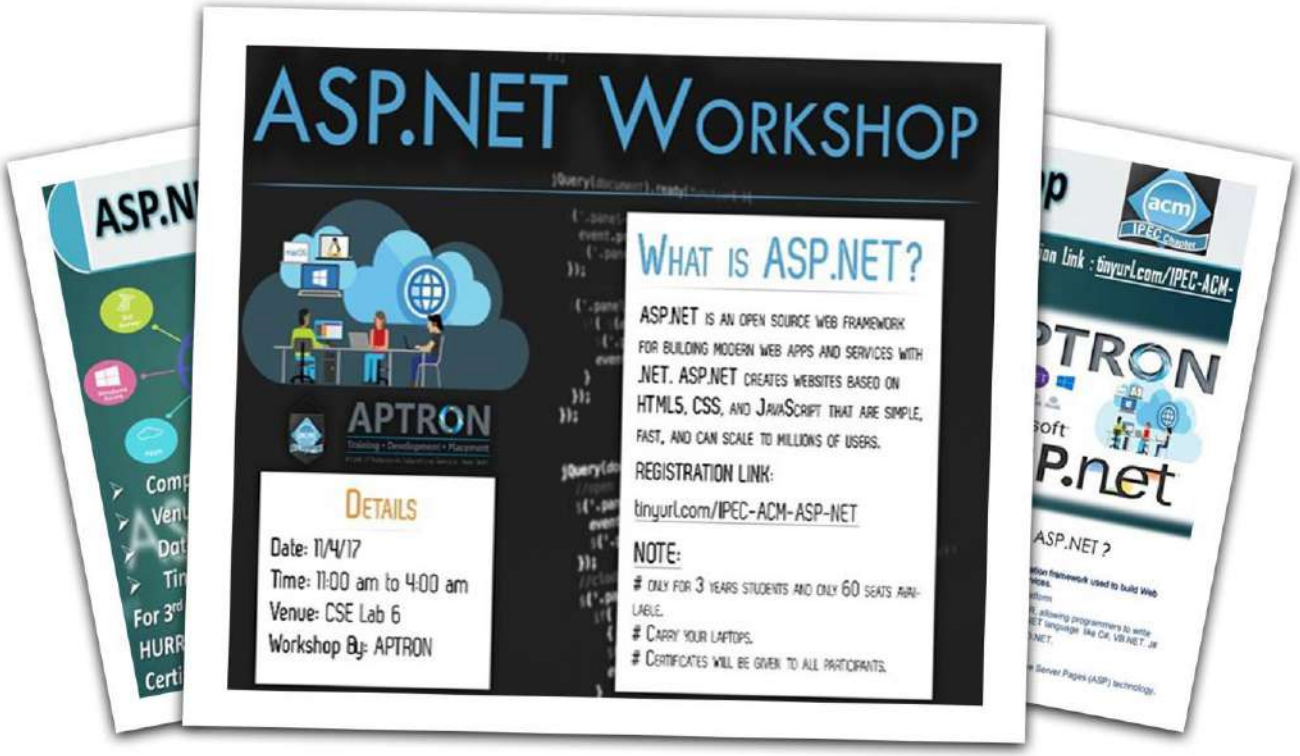
CRACK CODE EVENT

Association of computing machinery organized a coding competition named **CRACK CODE** for all the students of branch CS and IT on February 6, 2017.

The competition was organized under the guidance of and judgment of :-
Mrs. Pooja Tripathi (HOD IT)
Mrs. Rekha kashyap (HOD CS)

The competition was conducted with the intention to judge the competence level of coding within students.
This was a two round event:
In **Round 1** student had to convert the algorithm to flowchart & in **Round 2** the flowchart to code.
Students were excited to participate as they got the platform to assess their coding knowledge.
The winners are as follows :
1) Sudhanshu & Priyanka (2nd year CS)
2) Akshay & Pooja (2nd year CS)
3) Ayush Sharma (3rd year CS)

ASP .NET WORKSHOP



IPEC ACM STUDENT CHAPTER organized a workshop on **ASP.NET** for students of CS /IT 3rd year.

Workshop will be taken by the professionals from the company **APTRON**. Workshop on **ASP .NET** was organized by "Department of CS and IT" on 11 April 2016. The workshop started at 11:00 a.m. in CSE LAB 6.

NEW INITIATIVE

SIG GRAPHICS

SIG GRAPH is an international membership organization made up of thousands of people who share a passion for computer graphics and interactive techniques. SIGGRAPH members are involved in a wide variety of fields, including computer graphics research, software development, digital art, scientific visualization and more. It is considered as the most prestigious forum for the publication of computer graphics research

SIG WEB

SIG WEB is one of the Special Interest Groups of the Association for Computing Machinery. It welcomes members concerned with the WWW as well as those concerned with other aspects of hypertext and hypermedia. SIG offer a wealth of publications, conferences and resource archives covering a broad spectrum of technical expertise

SIG PLAN

SIG PLAN is a Special Interest Group of ACM that focuses on Programming Languages. In particular, SIGPLAN explores the design, implementation, theory, and efficient use of programming languages and associated tools. Its members are programming language users, developers, implementers, theoreticians, researchers and educators

SIG SOFT

The ACM Special Interest Group on Software Engineering provides a forum for computing professionals from industry, government and academia to examine principles, practices, and new research results in software engineering

SIG TRICKS

SIG TRICKS is to set up a computer environment in the minds of the computer science and IT students by making them aware of their computer system and the computer environment around them

SIG BIGDATA

SIG BIGDATA is to analyze the data using data analyzing tool HADOOP and to introduce students to the new up coming need for the for the computing environment.The another aspect to use the real time data and analyze it on a particular basis

We have started **SIGS** that is **Special Interest Groups** where learning is going on along with technical events. We have Facebook and Instagram pages where we post about our event details, and about new technologies.

SIG GRAPHICS

AIM :

Learning use of professional software for designing and research on designs.Those who love to design or draw will enjoy in this. Everyone loves sketching . Putting your thoughts virtually is the best way to explore . Think best and design the best. Create what you imagine .

WHAT DO WE LEARN:

Working on professional software like CorelDraw, Adobe Photoshop etc. Designing different logos, Abstract designs, poster making, designing characters & many more.

Students were given tutorial for making various graphics using Corel draw. Students made layout of a Certificate, SIG Logos, Logo Design (i.e. Angular JS, Chrome Icon, Apple logo, ACM logo), Poster Design, Business Card, Clip arts, Cartoon Abstract Design, Tattoo, Registration Poster, Instagram logo, Invitation card, Minimal graphics, Login Page and many more.

SIG WEB

AIM :

Learning all new technologies & coding languages used to make & maintain websites.

WHAT DO WE LEARN:

Coding on HTML, CSS, JavaScript, SQL, PHP, Bootstrap, etc. Building your own complete website (both frontend & back-end). Initially basic introduction of Web Development was given. The students were given a brief overview of web pages. They were guided to form Header tags, Tables, Google forms, Login page, Anchor Tags, etc. A detailed description of CSS was provided under which they were taught the use of style tags, CSS class. Students created a web page using both HTML and CSS. They learned about HTML frames, Dropdown Menu, Web-site using frames and dropdown. Further the course included Bootstrap tutorial, Bootstrap grid system, Responsive images using bootstrap, Navbar in bootstrap, Application of Favicon and Carousel in Bootstrap, Responsive website that contains Carou-sel, Favicon, Navbar using Bootstrap.

SIG PLAN

AIM :

It is a Special Interest Group of ACM that focuses on Programming Languages. It explores the design, implementation, theory, and efficient use of programming languages and associated tools. Its members are programming language users, developers, implementers, theoreticians, researchers and educators. Learning new techniques and concepts to solve real time world problems via coding.

WHAT DO WE LEARN:

Programming languages that are currently used in the development and technology. Working on languages like java, C++, complete concepts of oops programing & constructing algorithms. We are learning about the Java Programming Language from the basics. Task are alloted to the members on day to day basis. So be Ready to Learn ,Code and Live .

AIM :

Learning the skills required to become an Android Developer
It is a group for software engineering. It's objective is to educate on platform specific programming and deal with all issues related to software development such as specification and design, UI, debugging, maintenance. This group is working on educating it's members on Android Development. We have worked on installing Android Studio and running an Android Emulator.

WHAT DO WE LEARN:

Learning java(core), concepts of oops, basic use of XML, android environment. Making your own android App, & studying different UI's etc. Students created and tested the apps on their android phones. Students worked with the layouts and views which included Android Programming. Task was given to design the UI Handling. Description of Event handling was given, Calendar view, Switching between activities in android using implicit intent, Creation of broadcast Receiver using explicit intent.

AIM :

Learning the skills required for data analysis.
The aim of big data is to analyze the data using data analyzing tool HADOOP and to introduce it's member to the new up coming need for the for the computing environment.
It will not be confined to Hadoop we will look for programming languages which will help in data analysis.

WHAT DO WE LEARN:

Why should we learn Big Data?, Installation procedure in Linux and Windows both. Working with Hash map function and Hadoop installation. Map reduce and its characteristics.

SIG TRICKS

AIM :

The aim of the SIG tricks is to set up a computer environment in the minds of the computer science and IT students by making them aware of their computer system and the computer environment around them.

WHAT DO WE LEARN:

Various interesting activities took place in SIG TRICKS . This included Working of Ram, Google Search Algorithm, CPU Core System, Data Flow in Computer, Action Centre, File System which included Deletion and Recovery of Files. Moreover detailed discussion on installing and uninstalling any process was done. Various methods of file storage and reading were discussed for example Sequential, Linked and Indexed.

CORE TEAM

Chair: Cheshta Dhamija
Vice Chair: Suneet Srivastava
Treasurer: Ayush Gupta
General Secretary: Damini Rathore
Membership: Jai Jagwani and Divya Bajaj
Webmaster: Hardik Sachdeva
Technical Head: Nitish Raturi
Jt. Secretary: Jai Kishan Raghav and Abhay Jain
Documentation Head: Ashi Sharma
Media Head: Surbhi Pandey and Shubhendra Rajan
External affairs: Srishti Pandey
Sig Graphics Head: Abhay jain
Sig Web Head: Mohit Kumar and Animesh Basak
Sig BigData Head: Rishabh
Sig Tricks Head: Nishant Singh
Sig Soft Head: Kshitij Saksena and Pranav Jain
Sig Plan Head : Suneet Srivastava and Damini Rathore
Other Members :-

(a) Akshay Sachan
(b) Aman Verma
(c) Nitika Gupta
(d) Pooja Basak
(e) Saurav Gupta
(f) Shivam Garg
(g) Shivangi Jain
(h) Shivi Panwar
(i) Shreya Aggarwal
(j) Tanya Valecha
(k) Yamini Joshi

We cannot seek achievement for ourselves and forget about progress and prosperity for our community. Our ambitions must be broad enough to include the aspirations and needs of others, for their sakes and for our own.

Dr. Rekha Kashyap

i) **A Secured Real Time Scheduling Model for Cloud Hypervisor** accepted for publication in **International Journal of Cloud Applications and Computing (IJCAC), IGI Global, Indexed in ACM Digital Library**.

ii) **Economy Driven Real-time Scheduling for Cloud** at 10th **IEEE International Conference on Intelligent Systems and Controls(ISCO- 2016)**, 7-8 Jan, Coimbotore, India.

iii) Published in the conference proceedings by **IEEE Computer Society (CS) Press and included in IEEE Xplore**.

iv) Appointed as **Reviewer for Journal of Grid Computing**, Springer.

v) **Editorial reviewer board member** with **IJARCS** for 2016 to 2019.

vi) Delivered a Session on **Creating World Class Products Through Emerging Technology for, Make in India** during National Summit-2015 on Make in India: Innovation, Integration and on April 7, 2015, Indore

Dr. Pooja Tripathi

i) **Strengthen Cloud Computing Security with Enhanced Two Factor Authentication and Encryption** International Journal of Innovations and Advancement in Computer Science **IJIACS ISSN 2347 – 8616 Volume 4**, Special Issue May 2015.

ii) **Cloud-Sensor Network Integration: Review, Research and Reviews**: A Journal of Embedded System and Applications ISSN: 2395 – 6712(online) , ISSN: 2321 – 8533(print) Volume 4, Issue 1.

iii) **Senior Member for ACM** since 2013.

iv) **Reviewer for various Internal Conference and Journals**.

vi) **Moderator for master degree programs of IGNOU**.

vii) **Paper Setter for GGSIPU**, New Delhi.

viii) **Organizing Special Session on Computational Intelligence to Sustainable Computing through Data Sciences in** : 11th IN-DIACom: 2017 04th International conference on computing for sustainable Global Development.

Ms. Alka Singhal

i) **Content Rich and Collaborative E-Learning System using Orchestration as Service on Clouds: UniEdu Cloud**, accepted for publication for the **International Journal of Convergence Computing, under INDERSCIENCE Publication**.

ii) **E-learning on Clouds: A profitable and efficient Business Model** is accepted and published in **3rd International Conference On Innovative Research in Engineering Science and Management (ESM-16),2016 YMCA Delhi**

iii) **Personalized E-library: A Recommender system based on Learner's Feedback Model, 8th International, Conference on Intelligent Human Computer Interaction, (Accepted) BITS Pilani, 12-13 December, 2016**.

iv) **E-learning on Clouds: A profitable and efficient Business Model** published in **International Journal of Engineering Technology Management and Applied Sciences [IJETMAS], Vol.4, Issue4, 2016**

Initiated and revitalized ACM IPEC Student Chapter in college.

After thousands and thousands of dreams we awaken..
After thousands and thousands of births we are born..
This the end is only the beginning of a new journey.

- Brian Weiss

This is just a beginning of portraying the amazing journey of **IPEC ACM STUDENT CHAPTER** and to all the efforts of the team and faculty members to reach out, to showcase the splendid work being done.

YOU'RE NEVER TOO OLD TO LEARN

ipec-acm.ipec.org.in