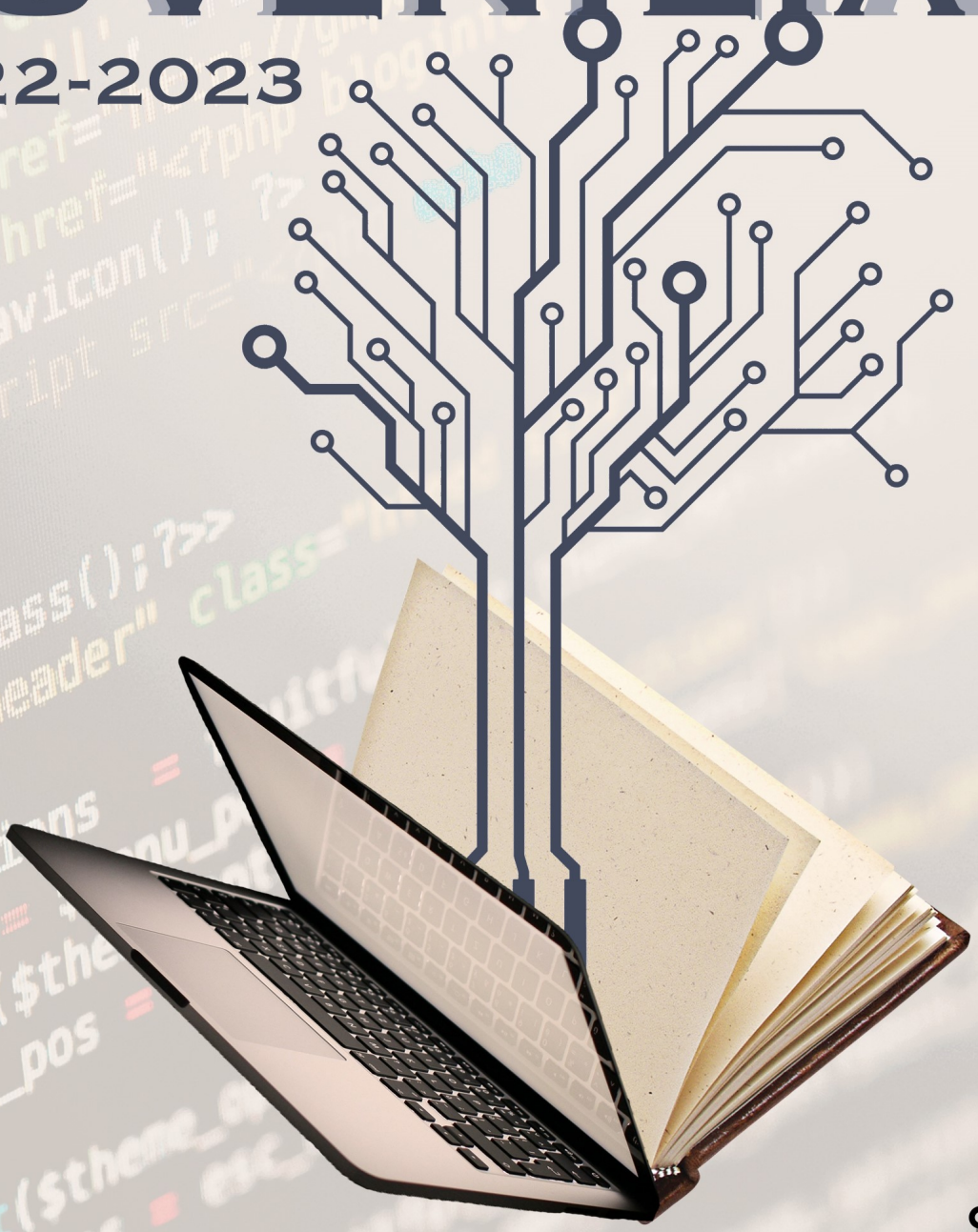
UEM
UNIVERSITY OF ENGINEERING & MANAGEMENT

श्रद्धावान लभते ज्ञानम्

Good Education, Good Jobs

JUVENILIA

2022-2023



BY

DEPARTMENT OF

COMPUTER APPLICATIONS

VERSION-0.1

Page Intentionally kept Blank

UEM
श्रद्धावान लभते ज्ञानम्
UNIVERSITY OF ENGINEERING & MANAGEMENT
Good Education, Good Jobs

JUVENILIA

AN INITIATIVE FROM
DEPARTMENT OF
COMPUTER APPLICATIONS

2022-2023

CONTENTS

MESSAGES FROM OUR MENTORS

MESSAGE FROM DESK OF DEAN, UEMK

Juvenilia is a work of technical art created by students in the CA department. Knowing that the students are experimenting with cutting-edge concepts, new technology, and publishing the magazine makes me incredibly happy. I commend the group on their exceptional abilities. I think that the readers will find this work to be entertaining and educational.

Prof. Dr. Rajiv Ganguly

MESSAGE FROM THE DESK OF THE HEAD OF THE DEPARTMENT, Computer Applications, UEMK

It gives me immense pleasure to share the first edition of the Departmental magazine "JUVENILIA" of the Department of Computer Applications (CA), University of Engineering and Management, Kolkata.

The department strives to offer a personalized, flexible, challenging and rewarding Post Graduate (MCA) program covering the essentials of contemporary Computer Applications. We provide an environment to students motivating them through a state-of-the-art infrastructure. The student-centric teaching and learning methodology adopting the Outcome Based Education (OBE) of National Education Policy (NEP)-2020 enables students to utilize new technologies and prepares them for various problem-solving and decision-making skills, resulting in a large number of students joining the top-notch corporate world and academia after successful completion of their respective programs.

Aligned with the philosophy of the IEM-UEM group, we believe in the complete development of a student beyond classroom teaching. As a result, the department constantly encourages our students to get involved in various co-curricular and extracurricular activities in terms of organizing/participating in workshops, seminars and conferences, various competitions, hackathons, innovation contests, techno-management festivals, creative writing competitions, cultural events, sports and so on. Over a period of time since the inception year 2015, the departmental students have shown immense possibilities in various activities and brought laurels from different corners of life - winning the second prize in National Defense Theme in Engineering Student Festival at India International Science Festival held at Goa, Best Innovator Award in Eastern Zonal Innovators-Industry (EZIIM2021) organized by Institution of Electronics and Telecommunication Engineers (IETE), Indian International & Science Festival (IISF) award, and many more.

The vibrant, dynamic teachers are the pillars of our department, who are counselling our students continuously with an aim to shape future citizens. Our students are the backbone of our department and are reaching new heights with the passing of time.

I take this opportunity to express my gratitude to the teachers and student editorial board members, whose immense efforts culminated in the first edition of the departmental magazine "JUVENILIA". I hope our magazine will come up with several editions in future with rich articles and write-ups in the field of technology, science, innovation, and literature to enrich the readers of our institution.

Thanks,

Prof. Dr. Anirban Das

MESSAGE FROM EDITOR'S DESK

We, the editorial board of **Juvenilia** the Association of CA, bring **Juvenilia** an embodiment of cutting-edge technologies and stunning data, to the forefront, shining some light on the creative brains of our budding engineers. Computer science is an area that is always increasing, and the power that modern technology possesses is unimaginably impressive, resulting in a dazzling array of ideas. For these reasons, **Juvenilia** is themed as "Idea is dawn." Dawn is the beginning.

We would like to take this opportunity to thank our placement coordinators for their tireless efforts in paving the road for talent and opportunity to come together. We would like to extend our sincere gratitude to all association facilitators for their outstanding efforts in planning and involving students in association activities. We would first like to express our gratitude to our dear faculty members for always supporting and supervising us in all of our endeavours. We sincerely hope that everyone who reads will appreciate it as much as we did write **Juvenilia** Happy reading, pals!

REPRESENTATIVES OF JUVENILIA

MANAGEMENT

Atanu Kundu
(MCA 2nd year)

Trishani Nandi
(MCA 2nd year)

DESIGNING

Swarnali Das
(MCA 2nd year)

Apurba Chakraborty
(MCA 2nd year)

Suryadipta Bhattacharyya
(MCA 1st year)

Nibedita Biswas

(MCA 2nd year)

Sourashish Chowdhury
(MCA 1st year)

Sambit Sardar

(MCA 2nd year)

DATA MINERS

Debadrita Mukhopadhyay
(MCA 2nd year)

Ritik Raj

(MCA 2nd year)

Parna Sarkar

(MCA 2nd year)

FACULTY MEMBERS OF DEPARTMENT OF COMPUTER APPLICATIONS

Prof. Dr. Anirban Das
Head of the Department of
Computer Applications, UEMK

Prof. Kaustuv Bhattacharjee
Assistant Professor
CA Department, UEMK

Prof. Somnath Banerjee
Assistant Professor,
CA Department, UEMK

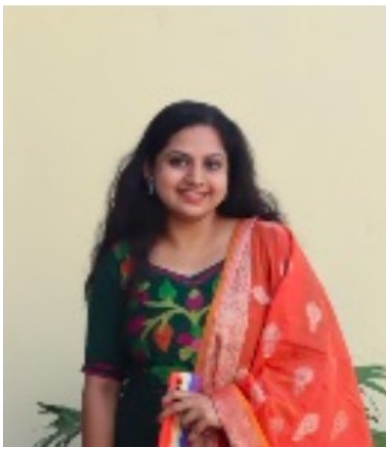
Prof. Anoy Chowdhury
Assistant Professor
CA Department, UEMK

Prof. Ankur Biswas
Assistant Professor
CA Department, UEMK

Prof. Poojarini Mitra
Assistant Professor,
CA Department, UEMK

Prof. Dr. Sudipta Basu Pal
Assosiate Professor,
CA Department, UEMK

Prof. Aparajita Mukherjee
Assistant Professor,
CA Department, UEMK



Prof. Poulami Ghosh
Assistant Professor,
CA Department, UEMK

Prof. Sujata Ghatak
Assistant Professor,
CA Department, UEMK

THE CA FAMILY!

ABOUT DEPARTMENT

VISION

To be globally recognized through excellence in Outcome Based Education utilizing the potential of Application Oriented Research and Innovation in the field of Computer Applications.

MISSION

M1: To make the department a Center for Excellence in Technical Education, Innovation & Research.

M2: To foster students technologically up-to-date and endow with a high-end environment of learning by doing through continuous amendment of the curriculum with periodic feedback from all stakeholders.

M3: To strive to touch global benchmarks in shaping future leaders to become part of top-notch industries and research organizations at national and international levels.

Computer Applications Department

TECHNICAL WRITE-UP

COVID 19 - LONG TERM EFFECT IN EDUCATION

Prof. Kaustuv Bhattacharjee
Assistant Professor,
Department of Computer Applications

People in the second decade of 21st Century have experienced one of the most devastating catastrophes in the history of human civilization which was perhaps not seen within last hundred years. While passing through the difficult times of COVID-19 during 2020, 2021 and a significant part of 2022, we revisited History and came to know about Spanish Flue that devastated the world about 100 years ago or the Black Death in Europe during the 14th Century. But COVID-19 seems to have a far reaching impact considering that tremendous advancement in Health care in last century couldn't minimize the devastation across the world due to this pandemic. COVID-19 perhaps is a stringent reminder to the human race – any technological advancement compromising on environment, pollution, global warning and deforestation may lead to more such calamities in future.

As we slowly come out of the effect of COVID-19, we also try to assess the impact it leaves in our society in a long term basis. People impacted by COVID-19 may have developed some health complications in long run, which we may come to know as more and more research findings are made public down the line. But needless to say, COVOD-19 has put a long lasting impact in the Education sector across the world. During the initial weeks of the pandemic, Education (school level to University level) had taken a complete back seat as expanding health infrastructure to accommodate large number of COVID infected patients, procuring necessary medicines, providing food and shelter to maintain the livelihood of a large number of population were the priorities of the society. But after the initial hick-ups, even the Education tried to continue its show thanks to the advent of technology driven by Internet – Zoom, Google meet, Microsoft Teams, Google Classroom and many more. This necessitated a paradigm shift in teaching-learning process, as it required learning the technology and utilizing them to the fullest extent by teachers, students, parents and other support staffs as well. This also threw a challenge in terms of digital divide of the society across the World as well as in India, leading to a section of the students with economic challenges or residing in remote places staying away from the ongoing education during the pandemic.

Initial weeks of online learning were exciting to all stake holders. However; staying confined in a house, not being able to spend time with friends and classmates face to face, unable to play, socialize and most importantly spending hours in front of Digital device on a regular basis lead to a detrimental effect during the 2 years timeframe starting from March 2020. By the time we were coming out of the pandemic on early 2022, it was globally accepted that online education is no match to the traditional face-to-face learning were students are getting their lessons in a structured manner. Time bound classes, face-to-face interaction with teachers, mingling with classmates and executing group activities are few aspects of student life which were missing during the online education. Disciplined life in school and colleges/universities, time bound assignments/tasks, going through a hard learning mechanism to grasp necessary knowledge and to earn the higher grades had been compromised during those two years. But these are the live skills one need to acquire to survive the work place once a person transitions from a student to a responsible citizen.

The after effects of COVID-19 are slowly surfacing with time. Going to schools/ colleges/universities on timely and regular basis has taken a toll. Online education has largely wiped out few fundamental academic habits like reading books, active listening, writing in pen and paper etc. Also, the evaluation of various examinations attended by the students during pandemic couldn't maintain the necessary sanctity due to various digital limitations as well as humanitarian consideration. Students once coming back to the classes and appearing for examinations are struggling to perform up to their potential as they lost the habit to sit and appear in examination for long hours. The fear of failure in class room examination after two years of easy going online examination is taking the toll in the society. Alarming news are coming from various corners which says that student count has drastically gone down this year as compared to previous year during a board examination. We need to remember that we are having a full phased offline board examination from 2023 only after the COVID time.

This phenomena, if not arrested immediately are likely to have a long term adverse effect in our society. The volume of competent workforce in various fields may shrink drastically, which will impact the Nation Building. A strong Nation can be built only if it has abundant, efficient work force.

Bringing back some of the fundamental practices of reading, writing and speaking may be a good starting point to get rid of this academic problem, some of the thoughts are mentioned below:

- 15 minutes daily reading – every student (school/college/university), irrespective of their branch of studies should read loudly a book of her/his choice of subject.

- Take a pen and paper to write two pages daily on any topic of interest in a single sitting.
- Identify a close mate and speak to him or her in English for 10-15 minutes in any topic of interest (Sports, movies, technology, politics etc).

While practicing the above, no digital media should be around during that time. Mobile phone should be either switched off or kept in vibration mode in a different room.

The above practices may not yield any immediate benefit in terms of academic result. But this may lead to self-discipline, self-control (not seeing the mobile for a certain time) and most importantly, getting back to the pre-covid normal life where reading, writing and speaking had been the fundamental aspects of any education- starting from the KG student to a person pursuing higher studies.

Finally, bringing back the changes as mentioned above among the students are not that difficult with little will power of the students and necessary guidance by teachers and parents. Because, students are considered to be flexible in their mindset, so that once they are convinced on the possible outcome of any action, they are most likely to absorb the same for the betterment of themselves and the society by large.

Earned Value Management (EVM) Principles and Usage

Prof. Poulami Ghosh
Assistant Professor,
Department of Computer Applications

Earned Value Management Principles

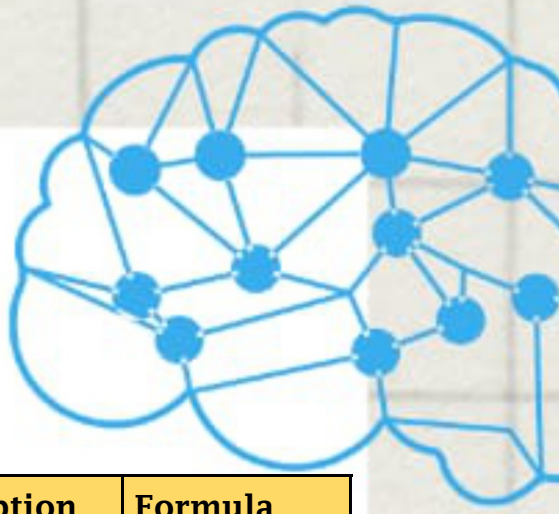
Earned value management is a project management technique, which measures project performance against the baselines and provide accurate forecasts of project performance throughout the entire life cycle of the project. It has the ability to combine measurements of the project management progress against the golden triangle of project Scope, Time and Costs.

Earned value performance management techniques used within the project management originates from the field of cost accounting, and is a very effective project management tool to show variance and trends on how the project is performing against the plan. It also provides mechanism to perform schedule, cost forecast of the project.

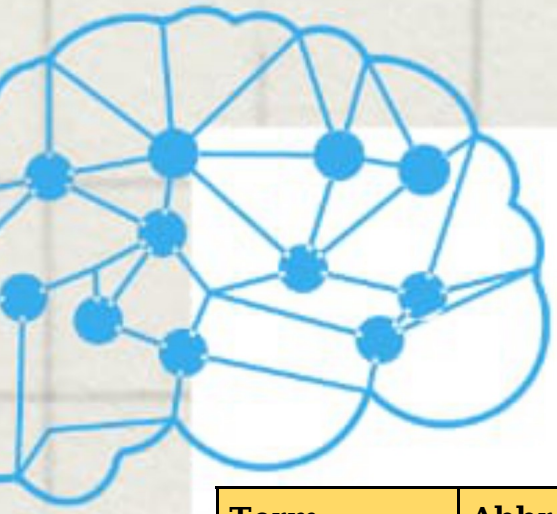
Earned Value Management can provide accurate forecasts of project performance problems, which becomes an important tool in the hands of project managers. It defines accurately as to where we are in the project and what corrective and preventive actions should be taken to be able to ensure that project is back on track should there any deviation from the plan and ensure eventual success of the project. Earned value management techniques are deployed to help achieve greater visibility and control of the project activities, which in turn helps in responding to issues early in the project, thus making it possible to complete the project within time and budget.

Term	Abbreviation	Description	Formula
Budgeted at Completion	BAC 4000	How much was originally planned for this project to cost.	No formula exists. BAC is derived by looking at the total budgeted cost for the project.

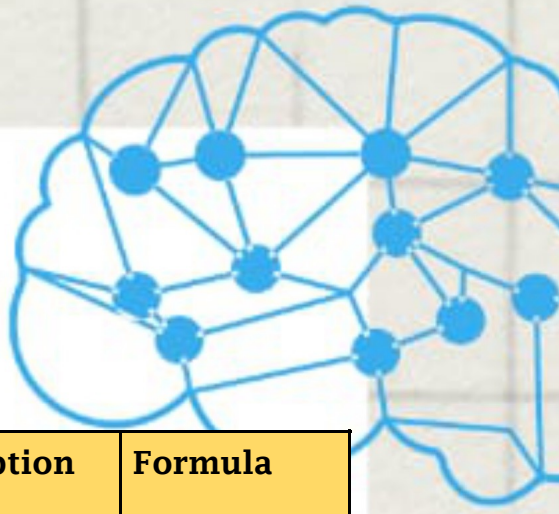
There are 12 key formulas associated with earned value management techniques used for assessing current and forecasted performance of the project.



Term	Abbreviation	Description	Formula
Planned Value (also known as Budgeted Cost of work Scheduled	PV (or BCWS) Day1 = 25% Complete, Spent : 1000 Day2=50%, Spent = 2200 Day3=50%+12.5%=62.5% Spent = 2800 PV = (Planned % Complete) *BAC=0.75*BAC=0.75*400=3000 EV=(Actual % Complete)*BAC = 0.625*4000=2500 AC= 2800 CV = EV-AC, SV=EV-PV,CPI=EV/AC, SPI=EV/PV CV=2500-2800=-300 SV=2500-3000=-500 CPI=2500/2800=0.89 SPI=2500/3000=0.83	How much work should have been completed at a point in time.	Planned % Complete X BAC
Earned Value (also known as Budgeted Cost of work Scheduled)	EV (or BCWP)	How much work was actually completed during a given period of time.	EV = Actual % Complete X BAC
Actual Cost (also known as Actual Cost of Work Performed)	AC (or ACWP)	The money spent during a given period of time.	Sum of costs for the given period of time.



Term	Abbreviation	Description	Formula
Cost Variance	CV	The difference between what we expected to spend and what was	CV = EV - AC
Schedule Variance	SV	The difference where we planned to be planned to be in the schedule and where we are where we are in the sched-	SV = EV - PV
Cost Performance Index	CPI	The rate at which the project performance is meeting the cost expectations during a given period of time.	CPI = EV / AC
Schedule Performance Index	SPI	The rate at which the project performance is meeting the schedule expectations up to a point in time.	SPI = EV / PV



Term	Abbreviation	Description	Formula
Estimate at Completion	EAC	Projecting the total cost at completion based on project performance up to a point in time.	EAC = BAC / CPI
Estimate to Completion	ETC	Projecting how much more will be spent based on past performance.	ETC = EAC - AC
Variance at Completion	VAC	The difference between what was budgeted and what will be spent.	VAC = BAC - EAC

Examples of EVM Calculation

Example 1:

You are the project Manager for the construction of 20 miles of sidewalk. According to your plan, the cost of construction will be $15,000 per mile and will take 8 weeks to complete.

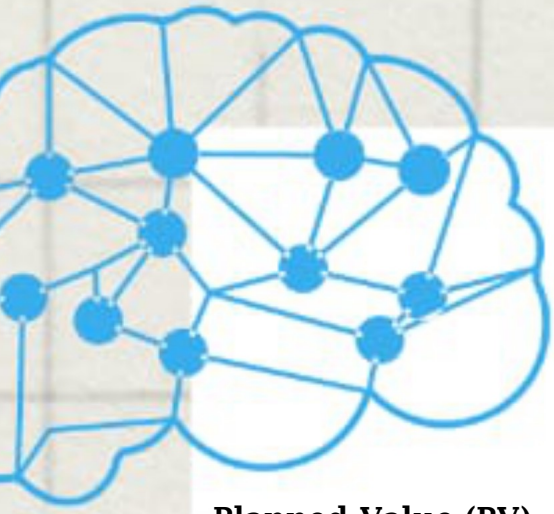
2 weeks into the project, you have spent $55,000 and completed 4 miles of sidewalk and you want to report performance and determine how much time and cost remain.

Based on the information provided compute all earned value terms.

Budgeted at Completion (BAC)

Budget at Completion (BAC) is calculated by the information total sidewalk to complete is 20 miles X $15,000 / mile. That equates to

BAC = 20 * $15,000 = $30,000



Planned Value (PV)

Planned Value (PV) is how much work was planned for this point in time.

Planned Value (PV) = Planned % Complete * BAC

Project is 2 weeks complete on an 8 week schedule, which equates to 2/8 * 100 = 25%

Hence Planned Value = 25% * $30,000 = 0.25 * $30,000 = $75,000

PV = $75,000

Earned Value (EV)

Earned value is what has been accomplished at the given point in time

EV = Actual % Complete * BAC

We have completed 4 miles of 20 miles completed, which equates to 4 / 20 * 100 = 20%

Hence earned Value = 20 % * $300,000 = $60,000

Actual Cost (AC)

Actual Cost is the actual Cost incurred at the given point in time.

Example says we have spent $55,000 to date

AC = Actual Cost

AC = $55,000

Cost Variance (CV)

Cost variance is how much how much actual costs differ from the planned cost. This can be derived by calculating the difference between EV and AC. In this case, EV of $60,000 – AC of $55,000. A positive variance reflects that the project is doing better on cost than expected. Conversely, a negative variance indicates that costs are running higher than planned.

CV = EV – AC

CV = $60,000 - $55,000 = $5,000

Schedule Variance (SV)

Schedule variance indicates how much the schedule differs from the plan. SV is derived from calculating the difference between EV of $60,000 and PV of $75,000. Positive variance indicates the project is ahead of schedule, whereas negative variance reflects we are behind schedule.

SV = EV – PV

SV = $60,000 - $75,000 = - $15,000

Cost Performance Index (CPI)

Cost performance Index gives an indication of how much we ae getting for every dollar spent. It is derived by dividing by Earned Value by the Actual Cost. In this case, Earned Value = $60,000 and actual Cost is $55,000

Hence CPI = $60,000 / $55,000 = 1.09

The figure indicates we are getting $1.09 worth of performance for every $1.00 spent. A CPI of 1 indicates that the project is exactly on track. The formula indicates value of 1 or greater that 1 are good, and values less than 1 are undesirable.

CPI = EV / AC = $60,000 / $55,000 = 1.09

Schedule Performance Index (SPI)

Schedule performance index tells us how fast the project is progressing compared to the project plan. It is derived by dividing Earned Value by the Planned Value. In this case Earned Value is $60,000 and Planned Value $75,000.

Hence SPI = $60,000 / $75000 = 0.8

This indicates that project is progressing at 80% of the rate of what is expected.

In the similar fashion, a SPI of 1 or greater than 1 are good, where values that are less than 1 are undesirable.

Estimate at Completion (EAC)

Estimate at completion is the expected project cost at the end of the project based on cost and schedule performance of the project at the given point in time.

EAC = BAC / CPI

In this case, EAC = $300,000 / 1.09 = $275,229

Estimate to Completion (ETC)

ETC is how much more the project is expected to cost from this point onwards based on the amount we have already spent so far.

ETC = EAC – AC

ETC = $275,229 - $55,000 = $229,229

Variance at Completion (VAC)

Variance at completion is the difference between what was originally budgeted and what is expected the project to cost. A positive variance indicates that project is doing better than projected, and negative variance indicates that project is expected to run over the costs.

VAC = BAC – EAC

VAC = $300,000 - $275,229 = $24,770

Example 2:

Another example will reinforce your understanding on Earned Value Management concept.

You are constructing 6 additional rooms on an office building. Each of the six rooms are identical, and the projected cost for the project is $100,000 and is expected to take 5 weeks.

At the end of the 2nd week, you have spent $17,500 per room and have finished 2 rooms. You are ready to begin on the 3rd week.

Based on the information provided compute all earned value terms.

CV = -1667
SV = -6667
CPI = 0.9523
SPI = 0.833

Budgeted at Completion (BAC)

Budget at Completion (BAC) is provided as the projected cost of the project

BAC = $100,000

Planned Value (PV)

Planned Value (PV) is how much work was planned for this point in time.

Planned Value (PV) = Planned % Complete * BAC

Project is 2 weeks complete on an 5 week schedule, which equates to 2/5 * 100 = 40%

Hence Planned Value = 40% * $100,000 = 0.40 * $100,000 = $40,000

PV = $40,000

Earned Value (EV)

Earned value is what has been accomplished at the given point in time

EV = Actual % Complete * BAC

We have completed 2 rooms 6 rooms, which equates to 2 / 6 * 100 = 33.33%

Hence earned Value = 33.33 % * $100,000 = $33,333

Actual Cost (AC)

Actual Cost is the actual Cost incurred at the given point in time.

Example says we have completed 2 rooms and spent $17,500 per room

AC = 2 * $75,500 = $35,000

Cost Variance (CV)

Cost variance is how much how much actual costs differ from the planned cost. This can be derived by calculating the difference between EV and AC. In this case, EV of $33,333 – AC of $35,000. A positive variance reflects that the project is doing better on cost than expected. Conversely, a negative variance indicates that costs are running higher than planned.

CV = EV – AC

CV = $33,000 - $35,000 = - $1666

Schedule Variance (SV)

Schedule variance indicates how much the schedule differs from the plan. SV is derived from calculating the difference between EV of $33,333 and PV of $40,000. Positive variance indicates the project is ahead of schedule, whereas negative variance reflects we are behind schedule.

SV = EV – PV

SV = $33,333 - $40,000 = - $6666

Cost Performance Index (CPI)

Cost performance Index gives an indication of how much we ae getting for every dollar spent. It is derived by dividing by Earned Value by the Actual Cost. In this case, Earned Value = $33,3330 and actual Cost is $35,000

Hence CPI = $33,333 / $35,000 = 0.95

The figure indicates we are getting $0.95 worth of performance for every $1.00 spent. A CPI of 1 indicates that the project is exactly on track. The formula indicates value of 1 or greater that 1 are good, and values less than 1 are undesirable.

Schedule Performance Index (SPI)

Schedule performance index tells us how fast the project is progressing compared to the project plan. It is derived by dividing Earned Value by the Planned Value. In this case Earned Value is $33,333 and Planned Value $40,000.

Hence SPI = $33,333 / $40,000 = 0.83

This indicates that project is progressing at 83% of the rate of what is expected.

In the similar fashion, a SPI of 1 or greater than 1 are good, where values that are less than 1 are undesirable.

Estimate at Completion (EAC)

Estimate at completion is the expected project cost at the end of the project based on cost and schedule performance of the project at the given point in time.

EAC = BAC / CPI

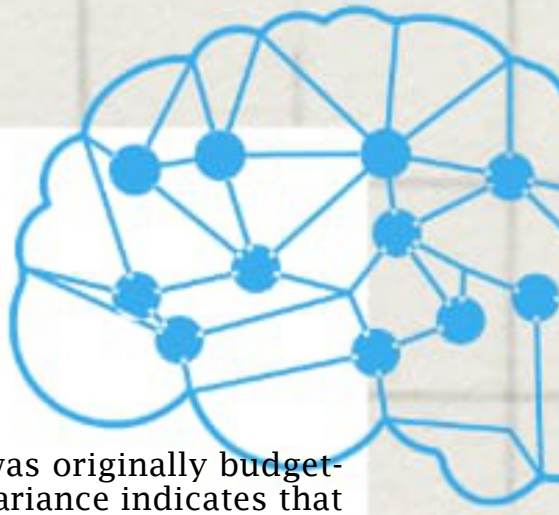
In this case, EAC = $100,000 / 0.95 = $105,263

Estimate to Completion (ETC)

ETC is how much more the project is expected to cost from this point onwards based on the amount we have already spent so far.

ETC = EAC – AC

ETC = $105,263 - $35,000 = $70,263



Variance at Completion (VAC)

Variance at completion is the difference between what was originally budgeted and what is expected the project to cost. A positive variance indicates that project is doing better than projected, and negative variance indicates that project is expected to run over the costs.

VAC = BAC – EAC

VAC = $100,000 - $105,263 = -$5,263

Conclusion

As a project manager, you must be familiar with situations when your projects unexpectedly sit in the grey area between success and failure. Sometimes, your project stays within the budget but overshot the timeline. It can adhere to the timeline but at the price of a high burnout rate in other circumstances. Despite planning meticulously, the lack of performance tracking against variables like cost and time contributes to project failure. So, if you are looking for more definitive goals for success, You must look at computation Earned Value Management on continuous basis.

Earned Value Management or EVM helps you see clearly 'where a project stands' and 'how far is the journey ahead.' This accuracy helps spot discrepancies, change plans, correct mistakes, and makes timely yet quality delivery possible.

EVM brings cost and time – two diverse yet crucial factors on a unified scale and lets you compare the execution against planned. It brings you closer to precision in project planning and accuracy in performance for unmatched process delivery. It empowers you to define responsibilities without burning out your team members and, at the same time, provide stakeholders the clarity in terms of the progress.

Advantages of the Earned Value Management

Why Earned Value Management is so important and useful method for revising your project:

- Deviation evaluation: The EVM will allow you to evaluate the magnitude of the deviation in regards to the baseline of the schedule.
- Real performance comparisons: It also compares this baseline for the measurement of the performance level in regards to the real performance of the schedule and costs plan.
- Measurement of the project's global performance: EVM is an extremely useful tool to monitor the global performance of the project.
- Requires little data: It only requires a few additional data other than the ones used to the normal management of the project.

Content Marketing

Somnath Banerjee
Assistant Professor
Department of Computer Applications

Content marketing is **a marketing strategy used to attract, engage, and retain an audience by creating and sharing relevant articles, videos, podcasts, and other media**. This approach establishes expertise, promotes brand awareness, and keeps your business top of mind when it's time to buy what you sell

Why Content Marketing?

Perhaps more important than understand what content marketing is, is understanding why content marketing is important to your business. First we need to understand the four steps of the buying cycle:

1. **Awareness.** Prior to awareness a customer may have a need, but they are not aware there is a solution.
2. **Research.** Once a customer is aware there is a solution, they will perform research to educate themselves. For example, a car buyer will try to find out what different types of cars exist, and which one will fit their needs.
3. **Consideration.** At this point the customer starts comparing different products from different vendors to make sure they're getting a high quality product at a fair price.
4. **Buy.** Finally, the customer makes their decision and moves forward with the transaction.

Goals

Benefits

Content marketing benefits businesses in many ways. When done right, an effective content marketing strategy can:

- Increase online visibility. A content strategy can help you attract more customers and website visitors, especially when people are constantly looking for solutions to their pain points. Offering educational and informative content about a topic they're interested in can help you increase visibility online through your website or social media accounts.
- Generate more leads. You can increase leads when content marketing is used to drive traffic. Since educating customers builds trust and helps them feel more comfortable purchasing from your business, you can generate more leads and start to develop relationships with potential shoppers.
- Boost loyalty. Loyalty is essential in marketing and business because the more loyal your customers are, the more repeat purchases they'll make. Offering content that informs consumers can help them begin to build trust with your brand and see you as a thought leader.
- Improve authority. Developing content is ideal for improving authority and becoming a thought leader in your industry. Not only does content help you build trust, but it can position your brand as the most authoritative on a particular topic.

Features

5 Key Characteristics of Successful Content Marketing:

1. Targeted Audience: As opposed to traditional advertising that may be more focused on marketing to new customers, content marketing mostly targets your current customers. ...
2. Tell a Story: ...
3. Provide Value: ...
4. Create a Dialogue: ...
5. Increase Profits:

Principles

5 Basic Principles of Content Marketing

1. Know your audience. ...
2. Find the right channel. ...
3. Be relevant. ...
4. Create and maintain the right voice and tone. ...
5. Make sure there's value in the content. ...

Advantages

The Top 10 Benefits of Content Marketing

1. More on-site content. ...
2. Higher visibility in search engines. ...
3. Higher domain authority. ...
4. More referral traffic. ...
5. More social traffic (and followers!). ...
6. Increased conversion potential. ...
7. Improved brand reputation. ...
8. Tighter customer/reader relationships.
9. Universal utility
10. Decreased marketing costs and compounding value.

Disadvantages

The benefits aren't immediate - content marketing can be a long process. ...

Skills and resource - content marketing can be time-consuming. ...

Finding content ideas - it can be tricky to come up with ideas for effective new topics and formats.

Types

Working

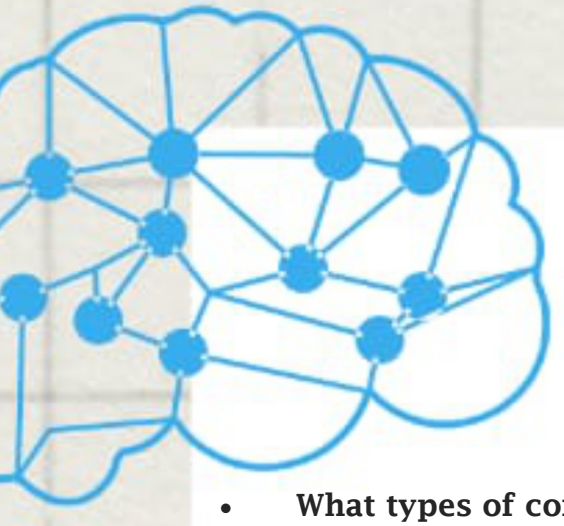
How content marketing works/Guidelines

- **The importance of content marketing**. What is real content marketing? Why is creating great content worth the effort for brands and businesses? What type of results can you possibly see from content marketing to convince the boss to get on board?

- **Why your brand needs a style guide.** How establishing a set of guidelines can help keep the content creation process consistent and scalable.

- **How has content marketing changed throughout the years.** In addition to the latest trends in content marketing, discover the century-old fundamentals that remain relevant today.

- **Tips for creating content with a purpose.** Understand how to set a goal for every piece of content you create and know where to place them in your funnel.



- **What types of content you can create?** Creating content in a variety of formats can help you reach a wider audience. We listed down 100 types of content you can create, with examples.

- **Examples of companies doing content marketing right.** How successful brands are driving much better results from well-executed content marketing campaigns.

- **Tools for content marketing success.** Learn some of the best and proven tools for content research, collaboration, SEO, and analytics.

- **Where to share and promote your content.** Find out how to get more reach for your content. Discover 20 more places where you can, and should, distribute your content for increased visibility, social shares, and engagement.

- **The synergy between content marketing and SEO.** Learn how to create content that will have the best chances of bringing in sustainable, qualified, and long-lasting organic traffic.

- **How to organize your content marketing efforts with an editorial calendar?** Discover a five-step process to easily set up your first editorial calendar.

- **Formats**

  Here are just some of the content marketing formats you can use:

  - Content curation
  - Opinion posts
  - White papers
  - Q & A's
  - E-books
  - Newsletters

Alternatively, you could add a new level of creativity with:

- Infographics
- Slideshows
- Online games
- Quizzes and surveys
- Mindmaps
- Memes
- Illustrations

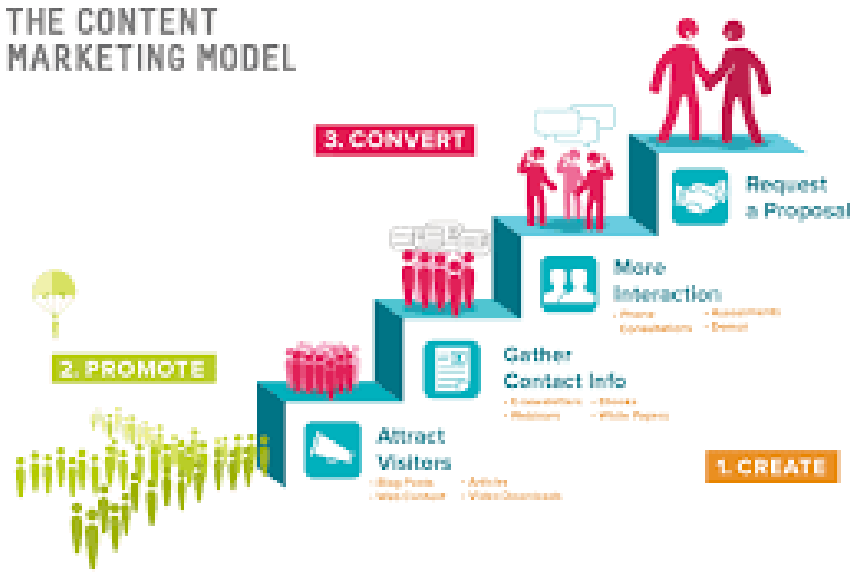
Or you might build authority and create consumer confidence with:

- Webinars
- Behind-the-scenes pieces
- How-tos
- Free tools and downloads

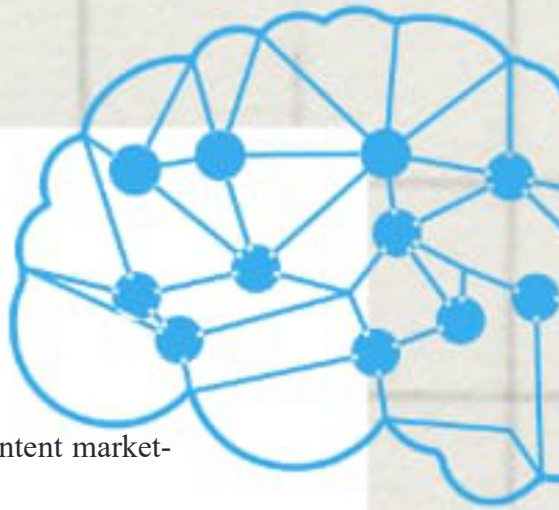
Whatever you want to achieve, you can use content mar

Secret

Model



Strategy



Challenges

Based on research and our own experience, these are the 10 biggest content marketing challenges marketers face today:

- Producing high-quality content
- Generating content consistently
- Prioritising content expertise
- Understanding different buyer personas
- Producing content in suitable formats
- Measuring content Return on Investment(ROI)
- Creating buy-in among stakeholders
- Aligning content with the buyer journey
- Activating content effectively
- Choosing the right channels

Myths

5 Content Marketing Myths

- Myth #1: The more content, the better.
- Myth #2 Content marketing gives quick results.
- Myth #3: Social Media Marketing Has Outrun Email Marketing.
- Myth #4: Videos Aren't as Important as Other Content Format.
- Myth #5: Only Some Businesses need Content Marketing

Ethical Issues

Ethical content is **honest, transparent, thorough, original, authentic, valuable, respectful, creative, and accurate**. One great thing about creating ethical content for marketing is that it also makes for more engaging content. And engaging, ethical content helps grow your sales and your brand

- Respect Everyone's Privacy. ...
- Be Transparent. ...
- Check and Report the Facts. ...
- Be Considerate of Others. ...
- Distorted or Overstated Statements. ...
- Avoid Over-Promising and Under-Delivering. ...
- Don't Indulge in Spam. …
- Don't Write Clickbait Headlines.

Tools


CONTENT MARKETING TOOLS
Co-Schedule
Headline Analyzer
Grammarly
Content Ideator
Buzzsumo
HubSpot
Outbrain
Copify
Hemingway Editor
Canva
Pocket
ClearVoice
QLTech
Develop. Automate. Grow.

Benefits of Blockchain in Ecommerce

Somnath Banerjee

Assistant Professor, Department of Computer Applications

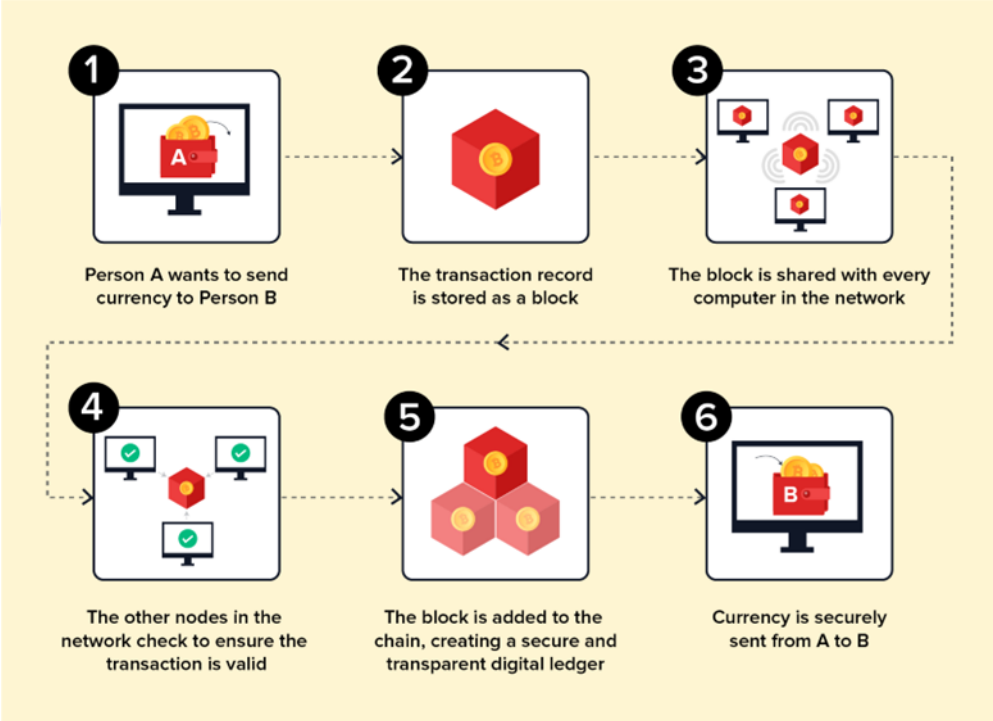
Definition of Blockchain

Blockchain has been a buzzword for a while now, but there's still plenty of confusion on what it is exactly. Although it's closely associated with Bitcoin, blockchain is not a type of cryptocurrency. It's not a programming language. It's a new technology.

The blockchain is essentially a completely secure online ledger that keeps a record of every transaction made at a given place.
Blockchain technology enables users to share and securely store digital assets. It has applications for payment processing, product searches, and even customer service.

Working

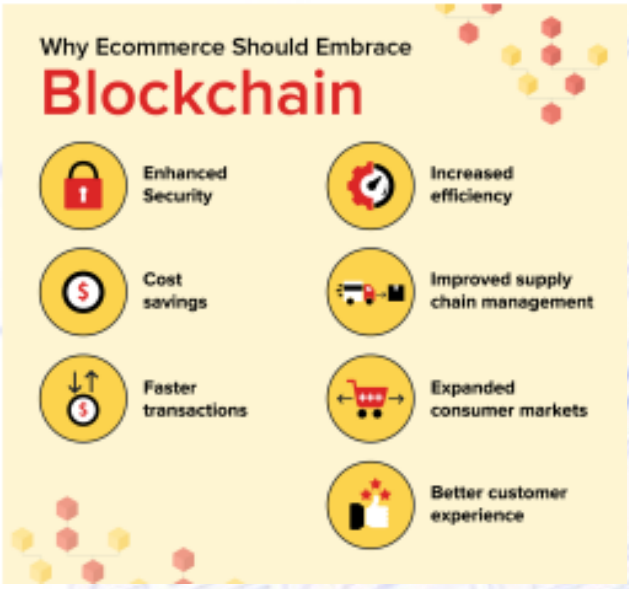
The name "blockchain" comes from the structure of this digital ledger: individual records, called blocks, are linked together in a list, called a chain.
This chain of blocks becomes a database that is shared across a network of computers, also referred to as *nodes*, *miners*, or *peers*. These nodes maintain their blockchain by validating and transmitting data about digital transactions, like the movement of cryptocurrency from one network user to another.

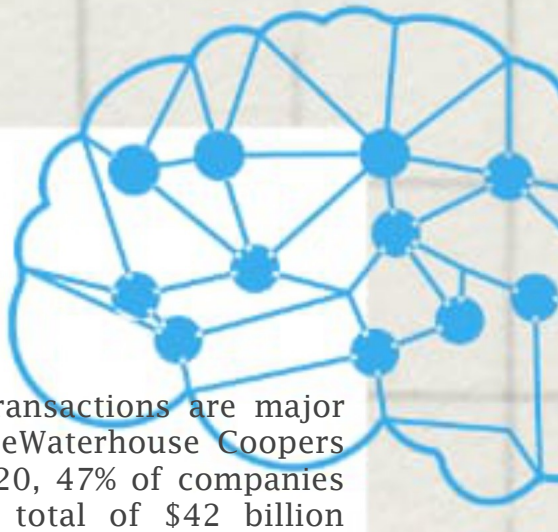


Here's an example: say you buy a pizza from your friend George and you pay him in Bitcoin. When you send George a Bitcoin, you create and publish an entry in the Bitcoin blockchain. The other computers in the network will check to make sure you haven't already sent the data representing that bitcoin to another user (preventing you from spending digital currency you've already spent). Every computer in the Bitcoin network keeps a record of all the transactions made within the network, and tracks the balance of every account.
Because this ledger isn't controlled by just one computer and doesn't have a single point of failure, all entries can be viewed by the entire network. This means data that's entered in a blockchain can't be deleted, altered, or corrupted.

Blockchain-based Ecommerce
Because blockchain makes transactions safer and faster, the potential impact on ecommerce is tremendous.
What is the purpose of blockchain applications in business and commerce? The most common blockchain technologies used in ecommerce are Ethereum, which provides a platform for ecommerce brands that want to manage their own blockchains; and Bitcoin, the cryptocurrency that led to the development of blockchain technology and allows customers to make purchases in sites and apps that accept Bitcoin as payment.

Benefits of Blockchain in Ecommerce
Because it makes online financial transactions more secure, blockchain is a win-win for both brands and buyers. But it also provides a lot of other benefits, including cutting costs, improving business processes, making transactions faster, and improving the overall customer experience.





1. **Enhanced security.** Data breaches and fraudulent transactions are major concerns for ecommerce retailers. According to PriceWaterhouse Coopers annual Global Economic Crime and Fraud Survey 2020, 47% of companies experienced fraud in the past 24 months with a total of $42 billion lost.Blockchain technology allows for trusted identities verified by multiple trusted parties, and offers the highest level of security for customer databases and CRM systems.
2. **Cost savings.** One big advantage of blockchain technology is that it allows retailers to combine services like payment processing, inventory management, product descriptions, etc. so that they spend less on buying and maintaining separate systems.
   And because cryptocurrencies like Bitcoin can be sent instantly peer-to-peer, there's no need to go through banking systems. This cuts down on fees charged by banks for issuing or acquiring funds, or fees charged by credit card companies to process payments.
3. **Easier, faster transactions.** Because blockchain transactions are basically instantaneous and do not go through traditional banks, there are no delays for payment processing or pending transactions. Purchases can be made instantly, which means faster order fulfillment for customers.
4. **Improved business processes.** Blockchains can store more than just transactional data. They can store smart contracts (also known as smart properties and chaincode), which can automate tasks based on preset rules and if-then statements, like automatic payments or inventory management. For example, you buy a Rolex online and pay a deposit via a blockchain-based cryptocurrency. You get a receipt held in a virtual contract. The retailer sends you the watch by a specified delivery date, and if it doesn't arrive on time, the blockchain releases a refund of your deposit. If you do receive the watch, the blockchain releases your full payment to the retailer. Blockchain can also store digital records like customer receipts and warranty information, making it easier to validate ownership and warranty validation, not to mention cut down on paper records.
5. **Reducing cost and complexity of supply chain management.** Blockchain in ecommerce supply chain means brands can cut the paper and manual work associated with shipping. Bills of lading for cargo can be placed on the blockchain at each stage of the supply chain, cutting down on administrative time/costs and making it easier to track shipments or verify product information and pallet weight.
   And for products with expiration dates or certificates of authenticity, blockchain can ensure the validity and quality of inventory and reassure customers they're getting what they paid for.

6. **Greater access for global consumers.** For customers living in developing countries, access to a reliable banking system is not a given. Blockchain and cryptocurrencies allow them to bypass the banking middle man, giving them access to a wider variety of ecommerce retailers. And it allows forward-thinking brands to tap into new and emerging markets.
7. **More convenient rewards and referrals programs.** Blockchain allows brands to easily issue rewards points that are redeemable across a variety of sites and partner brands. Companies can even pay content creators or influencers in digital tokens, which can then be converted into their preferred currency.

The Opportunities of Blockchain for E-Commerce Apps

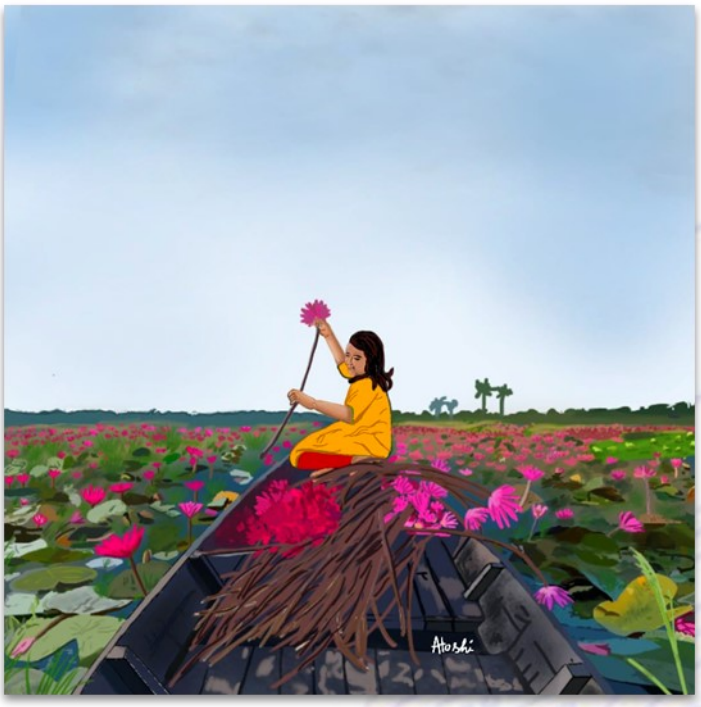
While the technology may be relatively new, there's one big reason why blockchain ecommerce platforms are gaining traction: they benefit both merchants and consumers.

Industry experts agree that while the potential for blockchain technology is tremendous, it's still in its earliest stages of adoption. Blockchain will grow to be integral to the new financial and ecommerce ecosystem.

PAINTINGS

~ Shreya Karmakar

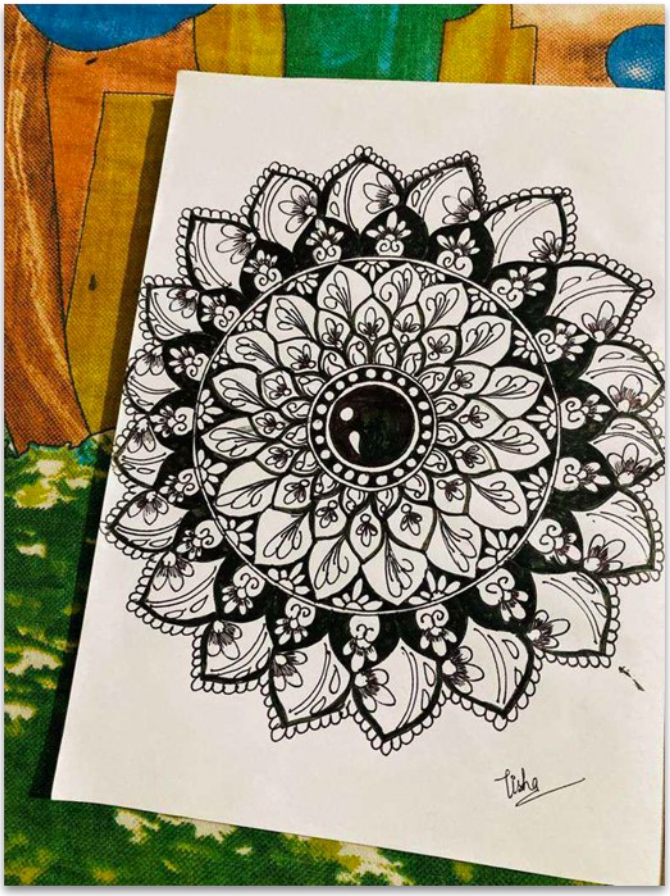
Suryadipta Bhattacharyya ~



Digital art by ~ Atoshi Biswas

~ Madhusree Chinya

Parna Sarkar ~



Tesha Mahanta

~Sourav Paul

~ Aparajita Saha

Sayantika Roy ~

CONTENT WRITING

LIFE

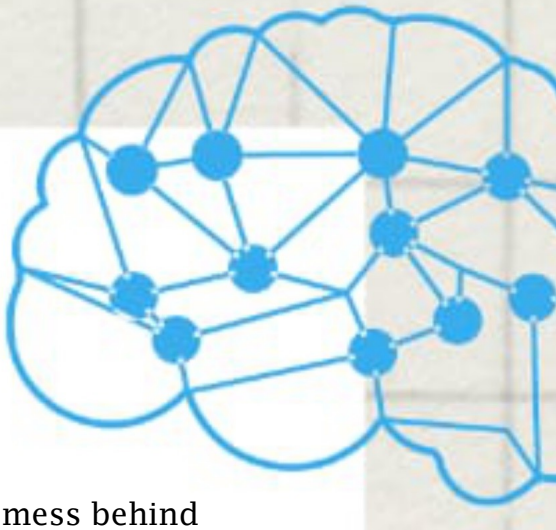
The life is an accidental abode
Narrative of happiness ever evade
O Yudhishthira, this mortal life
Is but a honey less, stinging hive
Even if It's an aborigine
Living an encumbrance free life that you prescribe.

~ Madhusree Chinya
(MCA 1st Year)

আত্মপ্রকাশ

ক্ষণিকের নীরবতা নেমে আসে লেখকের মনে;
বললেন, ভুলতে পেরেও ভুলতে পারিনি তোমাকে।
বইয়ের পাতা হয় না যে পুরোনো, লেখকের কাছে;
কাগজের গন্ধে, সে ফিরে পায় তোমাকে।
হঠাৎ করে, কইলেন লেখক-
"প্রেমিক মানুষ হইতে সময় লাগে তার,
প্রেমিকাকে পুরান করতে, চায় না সে আর।
প্রেমিক কাব্য লিখেছে সে অনেকবার,
তবুও প্রেমিকাকে, সে ফিরে পায়নি আর"।

রাজীব কুরী



Forbidden Love

You came like a storm in my life, unexpected, leaving a big mess behind
Do you remember us laying on the grass watching the stars?
Me laying my head on your shoulders, feeling safe and protected close to you
It hurts so much that I lost you
I lost the most precious person I have ever met
You opened my eyes and made me experience what real love feels like
I can't forget your eyes, your glances, your smile and your laugh
I never opened up before, I never came to someone so close
I thought I can't, I couldn't open up to anyone
But with you, I didn't recognise myself
I was happier, your positive charisma pulled me along with it
You always listened to me, never interrupted me, you even listened, when I made the dumbest jokes and laughed with me.
You made my heart race.
Looking into your eyes would make my whole body shiver
I trusted you so much that I gave you my first kiss.
I found the person that I always dreamt of and lost that person
We let our love fall
Because the reality devoured us
Our families could never accept our love
Because of our different nationalities
Aren't we all human?
But we were too weak
We couldn't lose our families
They were too important to us

So we let our love fall, we did what they wanted.

Now all we have left are the memories we made.

I don't wake up happy anymore, the world now seems dark and boring to me.

You won't knock at my door anymore.

You won't sing loudly to songs in your car with me anymore (even though, you couldn't sing at all)

There won't be your smell all over my room anymore

You won't give me your jacket because I have cold anymore

I won't feel your kisses any-
more Will I
ever forget you? I don't want
to.

Two lovers gave up, they didn't fight.

And now they try to continue with their life

But it won't be the same anymore because they both still have each other on their minds.

How unexpected life can be.

In one day you meet a person and this person will steal your heart and change Your entire life.

~ Sourav Paul

(MCA 1st year)

She Swings

I saw a girl,
In the night air glow,
Swinging merrily,
With the merry winds flow,

Her head hung down,
Said her life so blue, Her slightly wet eyes, predicted what she went through,

Her Rose Pink Lips,
Full of Words,
Some Unspoken, Some Neglected,
Some complains never to be heard.

Finally, the clouds melts,
On the dry grains,
For the last time she decides,
To adieu her emotions with the rain.

As rain drops touches,
Her merry little face,
And swiftly washes away,
The memories of sad old days,

Another gush of wind,
Whispers in her ear,
"It's not the end",
But could she hear?

The soul less body,
That hung herself,
Still swings with the wind,
Like she is twelve,

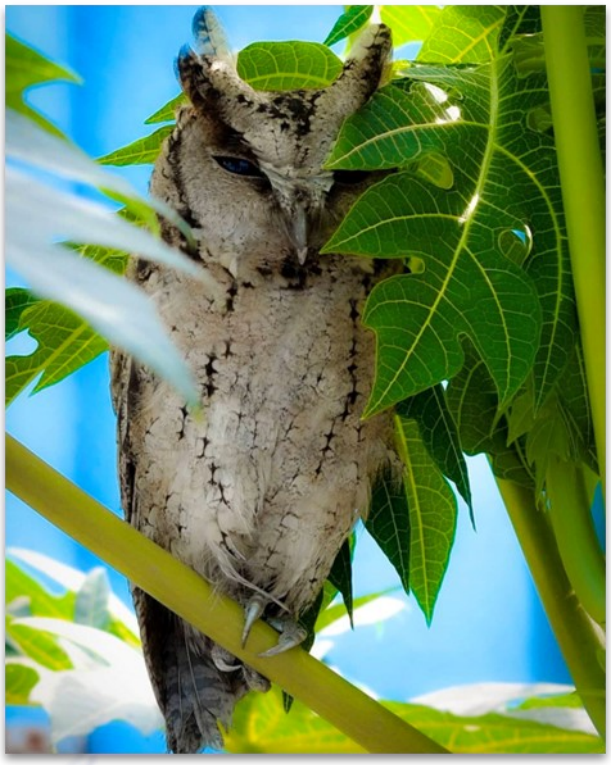
But for the first time,
She felt so free,
Answered why she swayed,
With such a spree,

Flexing her,
Imaginary wings,
With every gush of wind,
She swings...

~ Devraj Chowdhury (Ash)

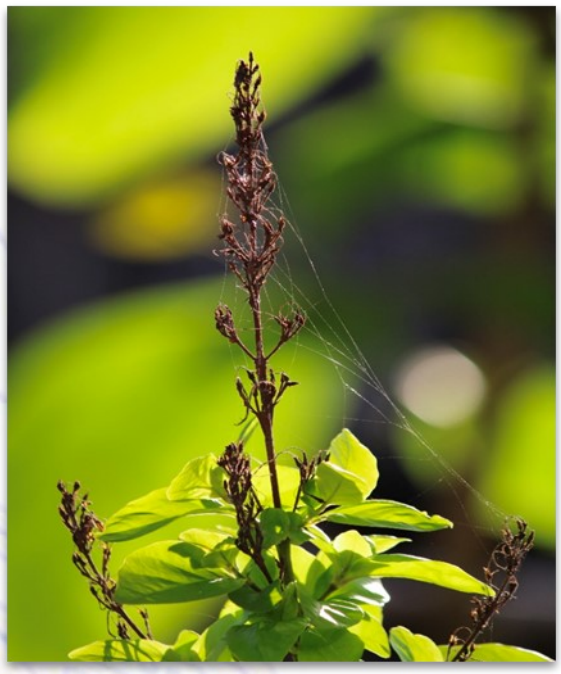
PHOTOGRAPHY

SILVERSHOTZ BY CA DEPARTMENT



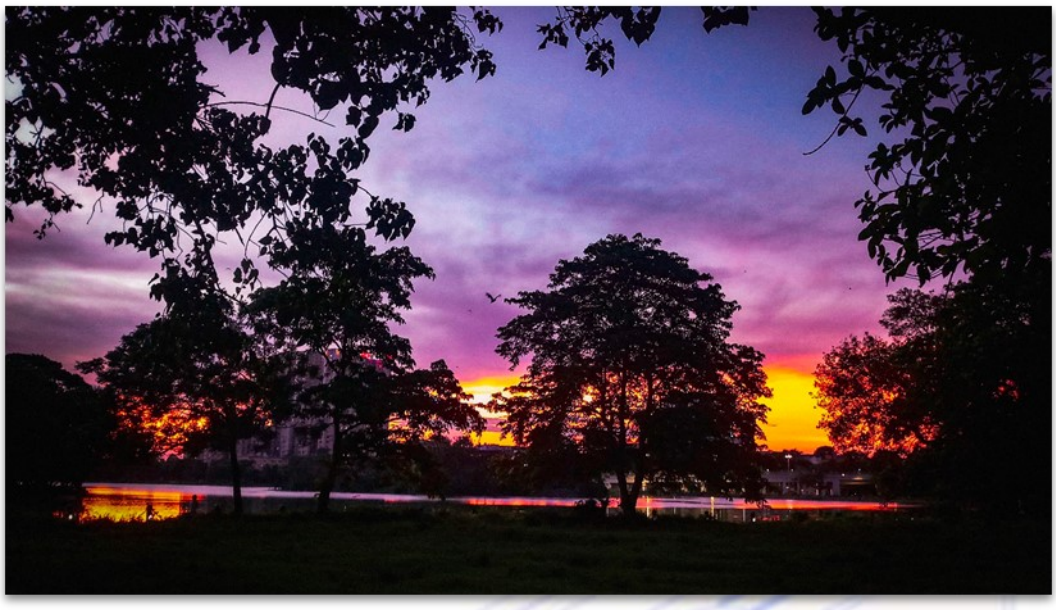
~ Swarnali Das

Subhadeep Karfa ~

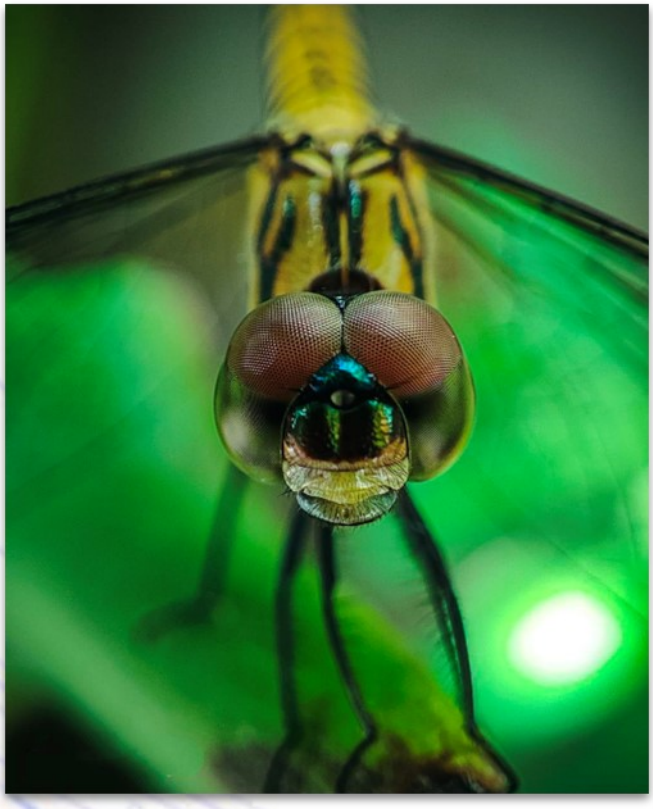


Atanu Kundu ~

Sourasish Chowdhury ~



~Trishani Nandi



SK Sohail Raja ~

Pritam Dutta ~

Sambit Sardar ~

ESSAY WRITING COMPETITION WINNERS

Genesis of Recent Technologies

By, Anusua Kar (1st Position)

Technology is a blessing for our future computers and technology is invented many years ago in mid 20th century. Old computing technology was enormous and expensive. It was used for complex calculations for scientific and military purposes. Then computing systems grow so much that everyone can easily access them and do any problem solved.

In the 20th century, the invention of the internet was a game-changing process for the computing system. With the internet, there is a new path to business and people connect from anywhere through social media. The businesses grew so much for this facility. There are smartphones available for everyone depending on their convenience, budget-friendly and pocket friendly. So nowadays, technology is easily available to everyone.

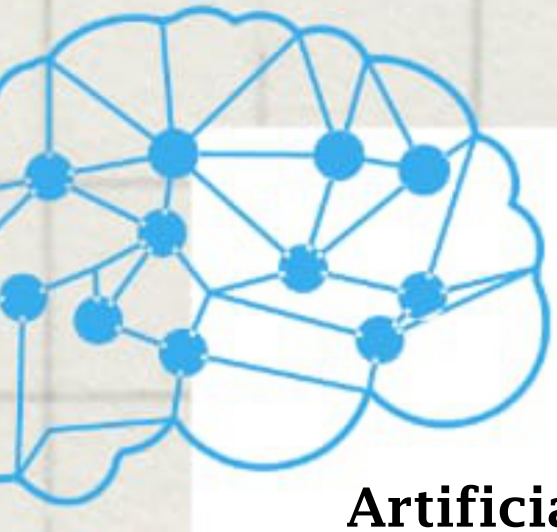
Now, some immense development in technology is taking place like AI technology, Robotics, 5G Network systems etc.

AI technology has grown so much like chatbots, virtual reality is now used by many people all over the world. They are easy to access and easy to use virtual reality is a process where you can use your brain to complete any task and entertain yourself and there is a huge economic profit is also included.

Chatgpt is a new technology which is under development but we can still use it on our computers and smartphone. It actually can solve any question and give a proper original answer as per your need completely free of cost. It is very useful for students.

5G networking system is also now getting very famous. It is the fastest network available now in the market. We can easily connect it to our mobile and use it. People can easily connect just within a fraction of a second. They can share any thoughts and opinions from anywhere and anytime.

In conclusion, from the past computing technology till now and in future we are growing so fast and there are many more technologies to explore. Technology is for everyone to use access easily and use their creativity.



Artificial Intelligenge: Bare or Boon

Aishi De (MCA 1st Year)

Artificial intelligence or known as AI, has been a revolutionary invention of the 20th Century. AI is practically designed to make a man's life easier, which implies that tasks like problem-solving, discussion, research and even more things can be done within a blink of an eye using AI.

For example, In transportation, back in the days when technology was not advanced, we had to rely on time-consuming solutions. But in today's age, with the help of artificial intelligence, it can navigate us to not only reach the correct destination but also in the quickest way possible.

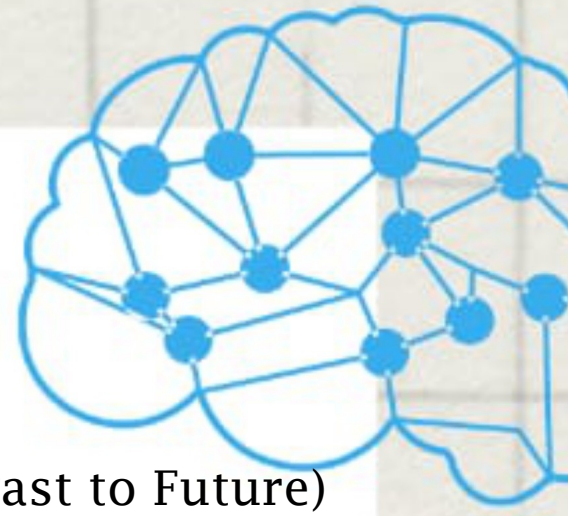
In another example, the popular AI chatbot, ChatGPT has changed the game of the technology world. From simple to complex problems, ChatGPT can solve almost any problem from any field of knowledge.

The advancement of Artificial intelligence has been rapidly growing and evolving as the day passes. Even though mankind has been blessed with AI, on the other hand, it is also raising severe social concerns.

Due to AI's vast knowledge of databases, common people have been suffering in various ways, such as –

- **Lack of Jobs**: AI can analyse and work on any amount of data in a quick manner which is manually impossible. Due to this reason, jobs like data entry, and data handling are slowly slipping away from humans causing job reduction.
- **Safety concerns**: Since AI is programmed with data that humans monitor, it can sometimes give out dangerous information without caution. Recently, Microsoft's chatbot has leaked information which can be fatal to mankind.

The reasons given above are proof that every boon has a bane. Artificial intelligence is without a doubt a creation which has shaped our world into a smarter, modern world. But to lead a secure life where technology is advancing every day, we have to be mindful of the upwards as well as the downwards of artificial intelligence.



The Evolution of Technology (From Past to Future)

Debanjan Sandhaki (MCA 1st Year)

"Technology is a gift from God, Afterlife, it is perhaps God's greatest gift. The mother of civilization, of arts, of science."

-Freeman Dyson

Introduction: The word technology has come from two Greek words, transliterated – "Techne" & "Logos". "Techne" means the skill, the art or how something is gained. The word 'Logos' is the utterance by which something is expressed. So, the word technology suggests that to discourses the way from which anything can be gained.

History of Technology: Archaeologists are unsure, that how the first technology was developed. They mark the use of stone, as the start of the first techniques, that gave an impact on human living. Where others mark fire & language are the first developed technology. Early man used the stone as their first material for survival, it was to edge for various use. The use of fire was also a very big mark of that time. Thereafter they invented wheels, they gained the skills of using various use. The use of fire was also a very big mark of that time. Thereafter they invented wheels, they gained skills in using various metals, manufacturing, agriculture, irrigation etc. Thereafter between 1400 to 1750 AD, Renaissance gave a huge impact on the arts, knowledge & culture, and discoveries & invention. The experts 18th century was the enlightenment of technology when the Industrial Revolution took place in the UK. Scientists invented steam engines, the spinning jenny, the locomotive, television, the computer, telegraphs, telephones, printing machines etc. This made the agrarian & handicraft economy dominated by industries and machines.

Modern Technology: The modern chronology is nothing but the advancement of old techniques, added with modifications. Nowadays technologies are being merged with artificial intelligence, the ability of digital computers or computer-controlled robots to commit tasks related to behaviours. This technology is now used in healthcare, finance, autonomous vehicles, robotics, cyber security, blockchain, the Internet of things, drone technology, digital marketing etc.

Future of Technology: According to the predictions of tech experts, we will experience a massive change by 2050. Nanobots will be connected the brain straight to the cloud. People reincarnation by AI. AI to create images by order prompts, sand batteries, energy-strong bricks, space touring, Necrobotics, Xenotransplantation, silicon chips, 3D printed boxes, 5G technology, and 3D printed eye tissue we give a massive impact on our daily life.

Technology in GlobalISation

Yugagni ghosh (MCA 1st Year)

Technology takes an important role in globalization. Technology helps us in our everyday life in so many ways. The main platforms through which technology helps us are transportation, communication, sales and information. There are the main works of technology in these fields are discussed below:

Transportation: Technology improves transportation in many ways such that railways, aircraft, and water transport through ships or boats. The technology helps in this field for the letter systems in minimum time.

Communication: Google chats, WhatsApp, etc make communication technology easier and letters nowadays. People can communicate with each other by using these technologies and can share pictures, video clips, and audio in a very minimum amount of time. People can also communicate with foreign citizens across the world by sitting in their own place. Using this technology, well-established IT companies, like TCS, Wipro, etc communicate with their foreign clients.

Sells: E-commerce, and marketplaces (FB marketplace, Instagram shop) give the selling technology a new level in the business platform. One can grow his/her business worldwide by using these methods. The technology helps people to create appropriate apps and websites according to their product needs and launch those in the market to reach the outcomes and they can communicate with each other according to their needs in it.

Information: In well-recognized IT companies, technology takes a huge part. Companies like TCS, Capgemini, Wipro, Cognizant etc help to develop new information technology by using some programming languages (like – C++, JAVA, and PYTHON) and introduce them to their clients and other people.

In conclusion, technology can help people in an efficient way which people didn't experience before this time.

DEPARTMENTAL EVENTS

Workshop on Web3 Ecosystem

Date:2nd April, 2023
Organized By: Department of Computer Applications (CA) and Computer Science (CS) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter

Type of Event: Workshop

Department of Computer Applications (CA) and Computer Science (CS) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter organized a Workshop on Web3 Ecosystem ("Demystifying Web3 Ecosystem") on 2nd April, 2023 Sunday, 11 AM.

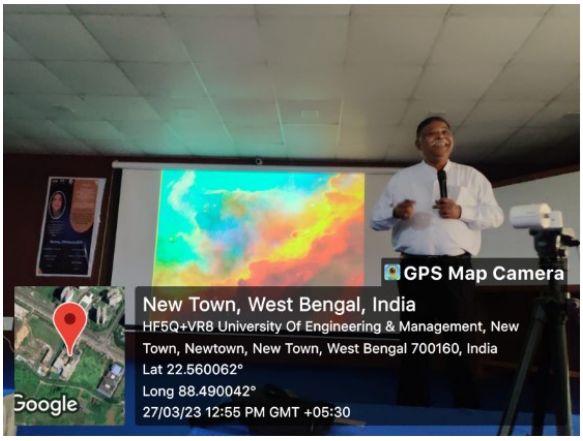
This workshop was based on Web3 Development. 5 budding entrepreneurs of various start-ups conducted the workshop sharing their journey since inception. The speakers had been welcomed by faculty co-coordinators and event organizers with mementos. The success of the event was reflected by 130 odd enthusiastic participants. The key differentiator of the workshop had been few hands-on demos with extensive question-answer session. The interactive workshop was made interesting by Quiz and competition, where 30 participants were provided with T-shirts, Coffee mugs and stickers. All participants were presented participation certificates.

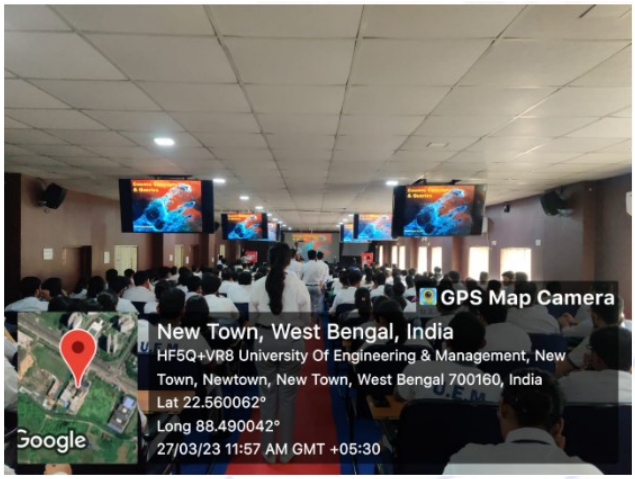
Faculty Coordinator: Kaustuv Bhattacharjee, Ankur Biswas

Expert Talk

Date: 27th March, 2023
Organized By: UEM Kolkata
Type of Event: Lecture Series

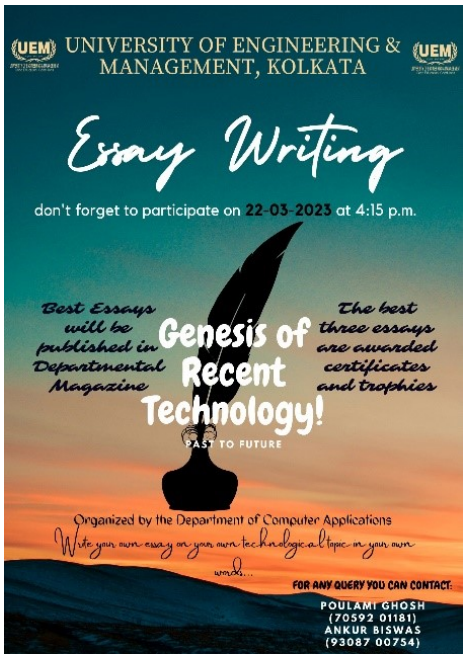
Dr. Debiprosad Duari, Former Director, Research & Academic, M.P. Birla Institute of Fundamental Research, M.P. Birla Planetarium, Kolkata inaugurated the Space Observatory at UEM Kolkata and delivered a lecture on "Cosmos-The Final Frontier" to various UEM Kolkata students at FICCI Auditorium. More than 50 MCA 1st year students attended the session along with students from other streams. The mind blowing lecture was absorbed by the students who attended the session with immense attention. The session raised interest among the students on Astronomy, resulting in interactive Q &A sessions at the end.





Essay Writing Competition
Date: 22 March 2023
Organized by the Department of Computer Applications, UEM Kolkata
Event Type: Competition

The technical essay writing competition is an endeavour to mine the multidimensional talents of our students by exploring their knowledge of different upcoming and past technologies and how they are related as well as their skills in representing that knowledge through the English language. Eighty-five students participated in the event in which the judges from the technological field, as well as English language experts hand-picked four essays which are given prizes and their essays, are published in the departmental magazine.



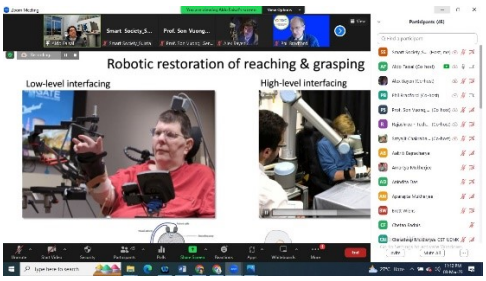
Faculty Coordinator: Poulami Ghosh & Ankur Biswas

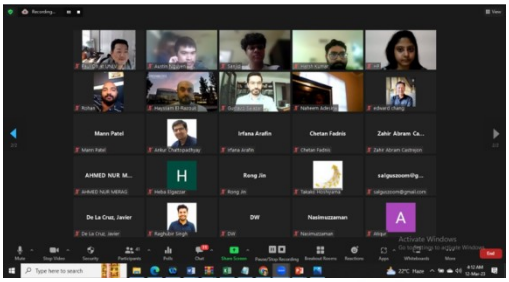
Conference

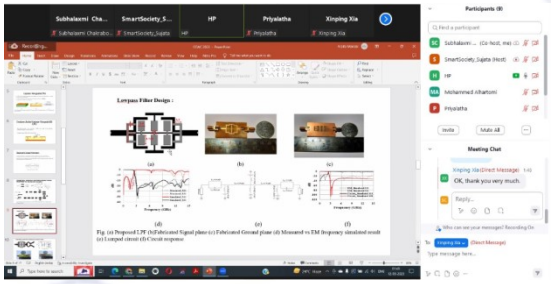
Date: 8th-11th March 2023

Organized By: Department of Computer Applications (CA), Department of Computer Science & Technology (CST)/Computer Science & Information Technology (CSIT)
Type of Event: Virtual Conference

Department of Computer Applications, Department of Computer Science & Technology (CST) /Computer Science & Information Technology (CSIT) of UEM Kolkata jointly facilitated the Virtual Conference namely 'The 2023 IEEE 13th Annual Computing and Communication Workshop and Conference' between 8th March and 11th March, 2023. The conference had 2 or 3 Keynote speeches every day followed by parallel sessions where a large number of papers had been presented by enthusiastic researchers across the globe on topics including ALGORITHMS AND THEORY, ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING, BIG DATA AND BIOMEDICAL COMPUTING, CLOUD COMPUTING ,COMPUTATIONAL INTELLIGENCE AND COMPUTER ARCHITECTURE, COMPUTER GRAPHICS, SIMULATION AND CRYPTOGRAPHY, EMBEDDED SYSTEMS, GREEN AND WIRELESS COMPUTING etc.





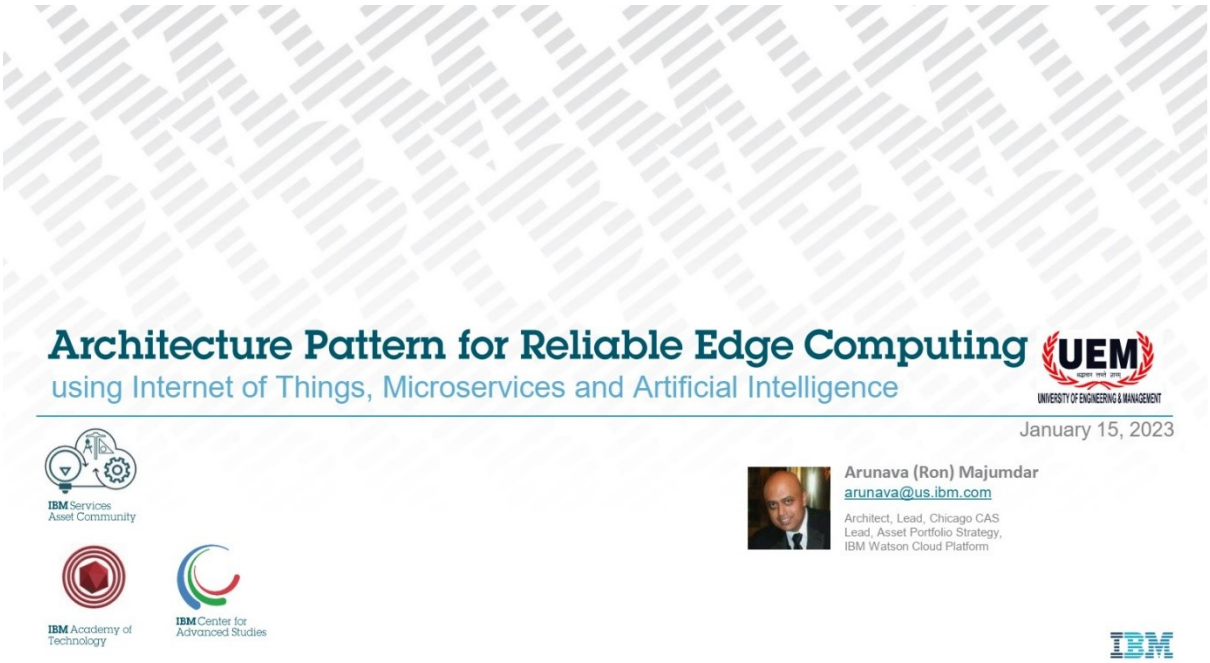


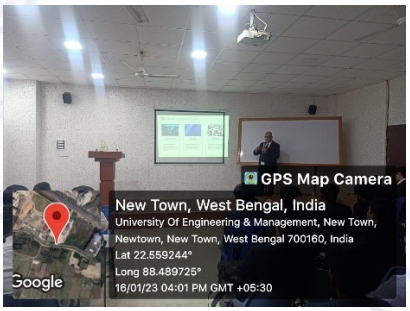
Faculty Co-ordinator: Prof. Biswadeb Bandopadhyay, Prof. (Dr.) Anirban Das, Prof. Kaustuv Bhattacharjee, Prof. Ankur Biswas, Prof. Sujata Ghatak, Prof. Anoy Chowdhury, Prof. Aparajita Mukherjee, Prof. Poulami Ghosh

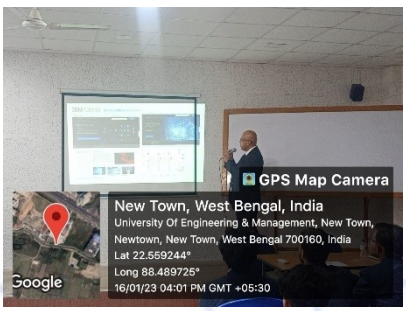
Expert Talk

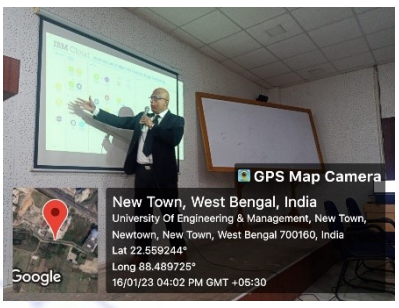
Date: 16th January, 2023
Organized By: Department of Computer Applications (CA)
Type of Event: Lecture Series

Department of Computer Applications, UEM Kolkata has organized an expert talk entitled as 'Asset Portfolio Strategy for the IBM Watson and Cloud Platform' by Mr. Arunava (Ron) Majumdar in association with Innovation Council, UEMK. The talk was very informative with an exhaustive showcase on moving workloads to the cloud and Application Modernization. Almost 50 students of MCA participated and enlightened with a comparatively new path of recent trends of cyber world.









Faculty Coordinator: Prof. Kaustuv Bhattacharjee and Prof. Ankur Biswas

Coding Olympiad

Date: 22nd October 2022

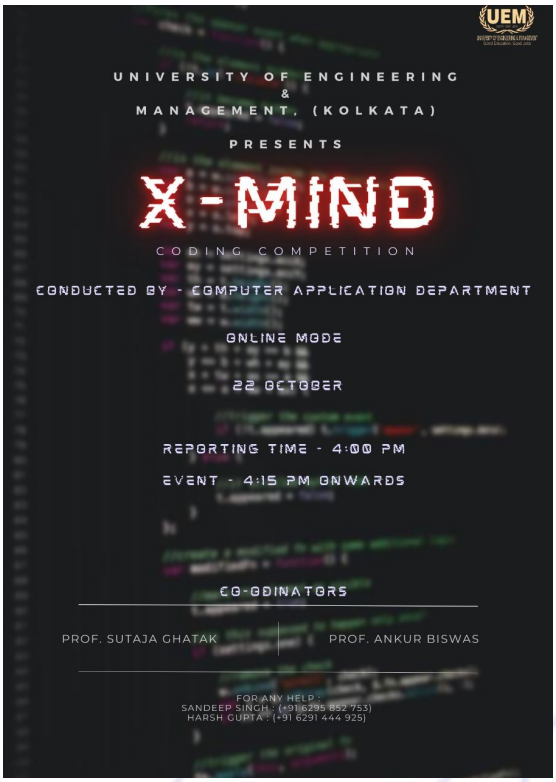
Organized By: Department of Computer Applications (CA)

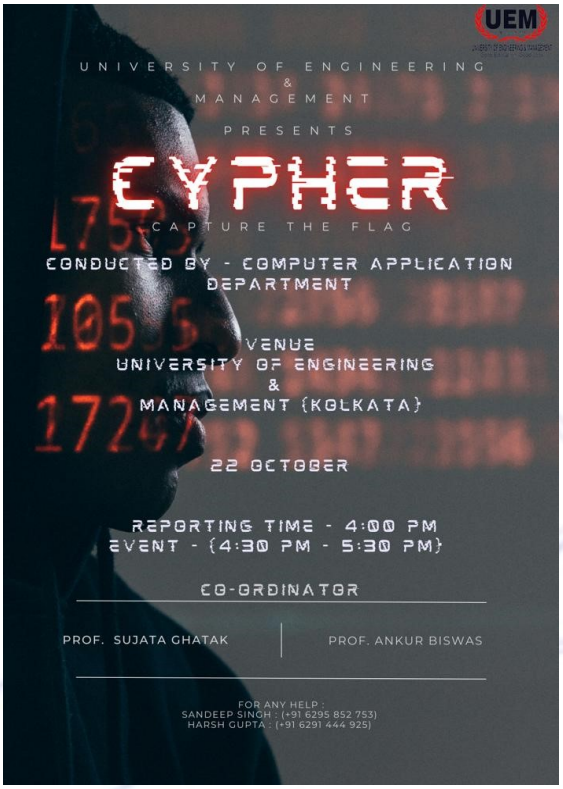
Type of Event: Coding Competition

Department of Computer Applications (CA), conducted a coding competition in the HackerRank Platform. There were two competitions included in the event:

X-Mind (Coding Competition): There were 10 challenges. The participants had to solve a maximum number of challenges within a stipulated amount of time. The ranking was made on the basis of the highest points earned with the least amount of time.

CYPHER (Capture the Flag): There wasa total of 6 challenges. Each of the stages was interlinked. The flag captured (Solution to challenge) in one stage will provide the opening flag (input) for the next stage.The ranking was made on the basis of the highest points earned with the least amount of time.





Faculty Coordinator: Sujata Ghatak, Ankur Biswas

Poster Competition

Date: 18th October 2022

Organized By: Computer Applications (CA)

Type of Event: Poster Exhibition

Department of Computer Applications (CA) organized an online Poster Competition on 24th September, Friday, 4:15 PM.

The online Poster Competition was participated by 11 teams comprising MCA students. The competition was judged by Prof. (Dr.) Arabinda Chakraborty (Associate Professor, Department of Basic Science and Humanities) and Prof. Stobak Dutta (Assistant Professor of Department of CST/CSIT).

Faculty Coordinator: Poojarini Mitra, Ankur Biswas

Project Competition

Date: 29th April 2022

Organized By: Department of Computer Applications (CA)

Type of Event: Project Competition

Department of Computer Applications (CA) organized an online Project Competition on 29th April, Friday, 4:15 PM.

The offline Project Competition was participated by 10 teams comprising MCA students. The competition was judged by Dr. Sudipta Basu Pal (Assistant Professor, Department of CST/CSIT) and Prof.Panchali Dutta Chowdhury (Assistant Professor of Department of CST/CSIT).

Faculty Coordinator: Sujata Ghatak, Anoy Chowdhury and Aparajita Mukherjee

Virtual Industrial Tour

Date :2nd September 2020

Organized By: Department of Computer Science (CS) and Computer Applications (CA)

Department of Computer Science (CS) and Computer Applications (CA) organized Virtual Industrial Tour on 2nd September, Wednesday, 4:15 PM on the topic namely "Work Culture at Infosys".

The Pre-recorded available over the internet lecture session was provided by the Founder Chairman of Infosys, Mr. N.R. Narayana Murthy. The session provided a glimpse of the remarkable growth of Infosys illustrated through the mesmerizing speech by Mr. Murthy. The success journey was further elaborated by some of the other stalwarts of Infosys. The session was attended by more than 40 MCA students.

Type of Event: Industry Visit

Faculty Coordinators: Prof. Anoy Chowdhury/ Prof. Rituparna Basak

Virtual Industry Tour

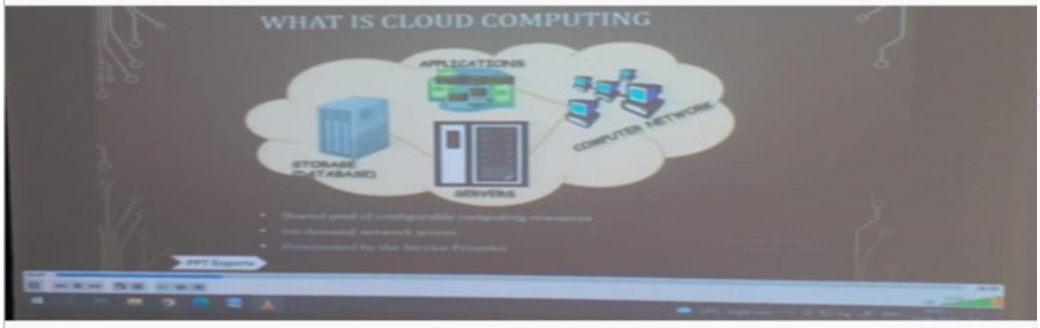
Date:22nd April 2022

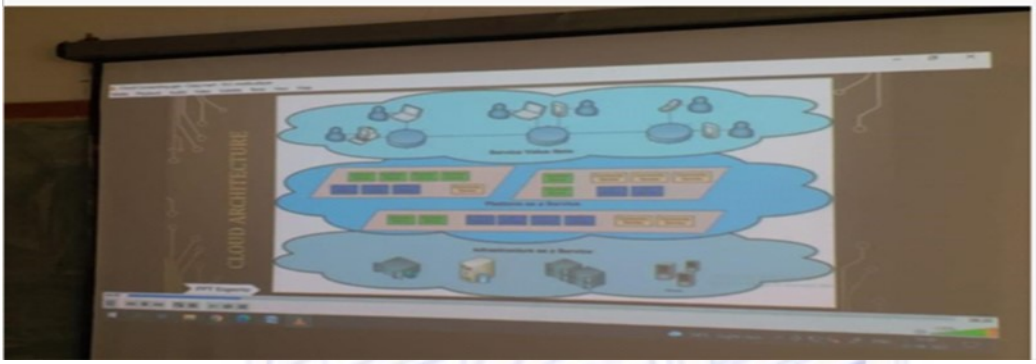
Organized By: Department of Computer Applications (CA)

Department of Computer Applications (CA), conducted a Virtual Industry Tour on April 22, 2022 for MCA First Year Students on Cloud Computing, where the lessons consisted of Current IT Challenges, how Cloud Computing helps overcome those IT Challenges, Cloud Service Models, and Cloud Deployment Models, Advantages of Cloud Computing. 30 students participated in this Virtual Industry Tour. Few snapshots of this event are captured below.

Type of Event: Industry Visit

Faculty co-ordinators: Prof. Biswadeb Bandyopadhayay/ Prof. Somnath Banerjee





Android App Development Workshop

Date :9th April & 10th April, 2022

Organized By: Department of Computer Applications (CA)/ Department of Computer Science

Type of Event: Workshop

Department of Computer Applications (CA) and Department of Computer Science along with top three technical communities namely UEM Kolkata ACM Student Chapter, UEM Kolkata CSI Student Chapter and UEM Kolkata IEEE Student Chapter hosted a 2-day Workshop on Android App Development.
Android App Development is the interaction by which applications are made for gadgets running the Android Operating System. It can assist a business in reaching out to more customers, improves its sales, improves its brand image, and creating a loyal customer base. In this workshop, we exhibited different android projects and assisted our participants with building some real-life projects. The workshop was participated by 20 students from the department along with other departmental students.

Faculty Coordinators: Prof. Kaustuv Bhattacharjee/ Prof. Ankur Biswas

Workshop on: An Introduction to UX Designing

Virtual Workshop on Internet of Things (IoT)

Date: 24th April, Saturday

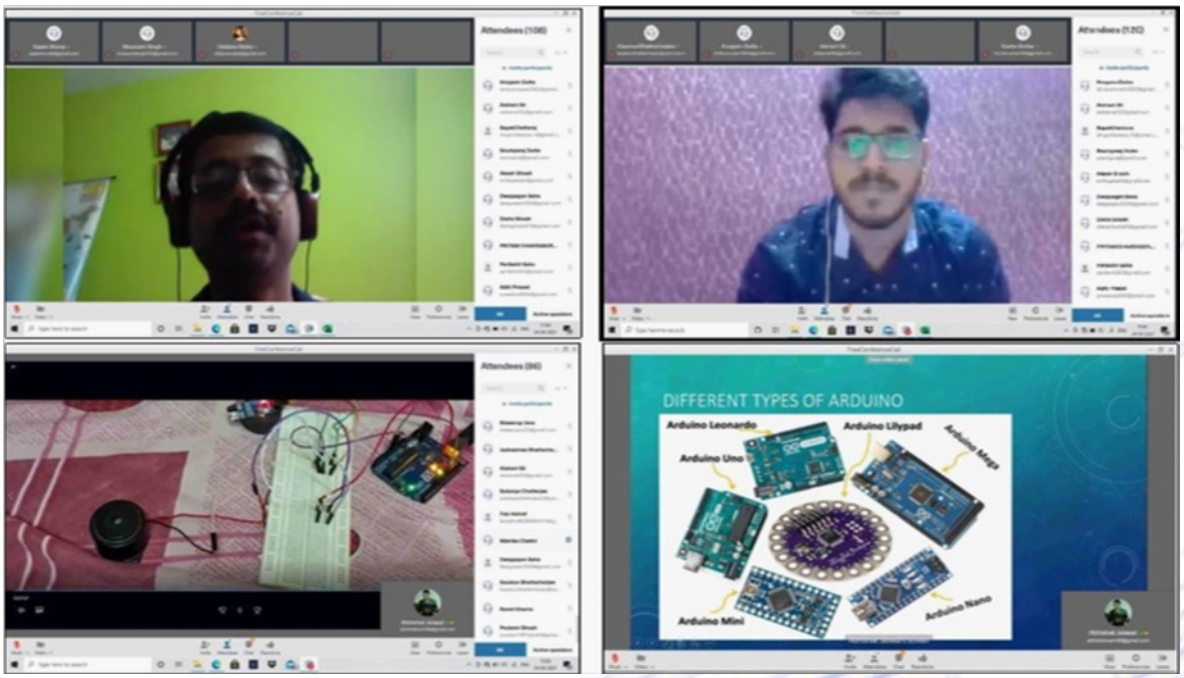
Organized By: Department of Computer Applications (CA) in collaboration with UEM KolkataACM Student Chapter and UEM Kolkata CSI Student Chapter

Type of Event: Workshop

Department of Computer Science (CS) and Computer Applications (CA) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter organized an online Virtual Workshop on Internet of Things (IoT) on 24th April, Saturday, 11 AM.

Internet of Things is a network of physical devices that are embedded with software, sensors, and network connectivity to collect and exchange data. IoT makes everyday objects 'smart' by enabling them to transmit data and automate tasks, without requiring any manual intervention. In this workshop, various IoT Projects were demonstrated to help attendees to build some real- life projects.

The success of the event was reflected by 150 odd enthusiastic participants. The key differentiator of the workshop had been few hands-on demos in the online mode as well as some important tips to develop smart projects using IoT, a big take away by the participants.



Faculty Coordinator: Prof. Kaustuv Bhattacharjee, Prof. Sudipto Kumar Mandal, Prof. Piyali Chandra, Ankur Biswas

Workshop on: Internet of Things (IOT)

Workshop on An Introduction to UX Designing

Date: 21st Aug, 2021

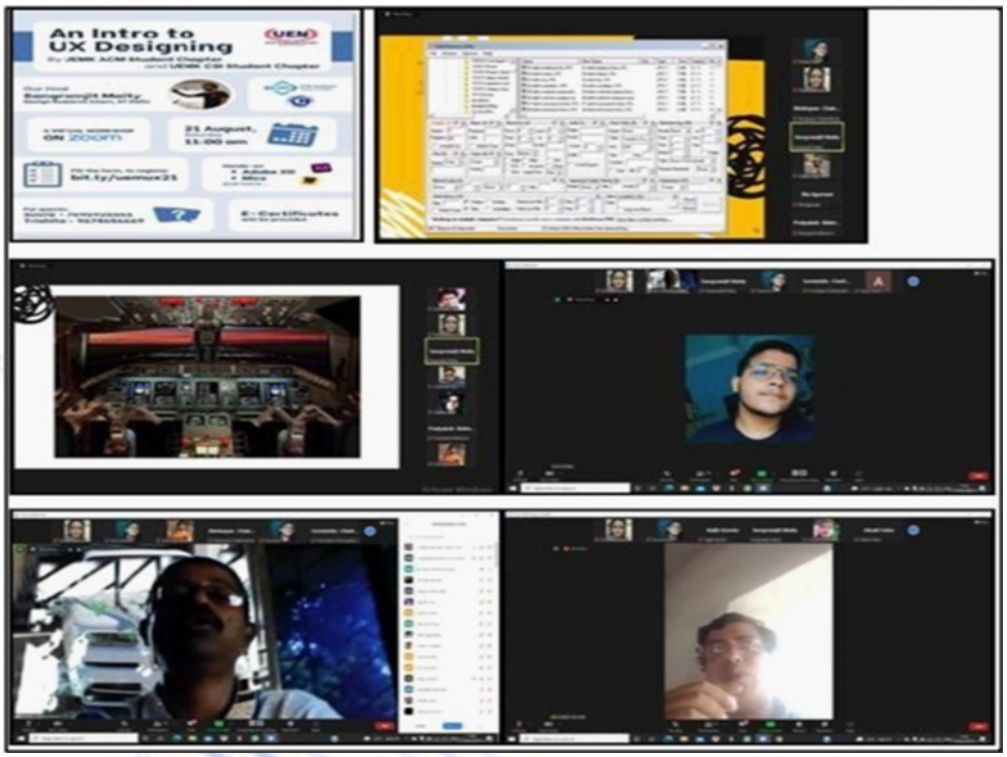
Organized By: Department of Computer Science (CS) & Department of Computer Applications (CA) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter

Type of Event: Workshop

Department of Computer Applications (CA) and Computer Science (CS) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter organized an online Virtual Workshop on An Introduction to UX Designing on 21st Aug, 2021 Saturday, 11 AM.

This workshop was based on the design of UX. UX stands for user experience. UX Design is studying user behaviour and understanding user motivations to design better digital experiences. UX designers tend to follow a certain sequence for each project: carrying out user research, analysing their findings, defining user personas, mapping out user flows, creating wireframes and prototypes, conducting user testing, and finally, handing the designs over for visual design and development.

The success of the event was reflected by 120 odd enthusiastic participants. The key differentiator of the workshop had been few hands-on demo with extensive question-answer session on UX Design approach for better user experience. The discussion also emphasized the potential career growth opportunities available through UX Design.



Faculty Coordinators: Prof. Kaustuv Bhattacharjee/ Prof. Ankur Biswas

Workshop on: An Introduction to UX Designing

Workshop on Cyber Security and Cloud Computing

Date:15th October, 2022

Organized By : Department of Computer Applications (CA) and Computer Science (CS) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter

Type of Event: Workshop

Department of Computer Applications (CA) and Computer Science (CS) in collaboration with UEM Kolkata ACM Student Chapter and UEM Kolkata CSI Student Chapter organized a Workshop on An Introduction to UX Designing on 15th October, 2022 Saturday, 11 AM.

This workshop was based on Cyber Security and Cloud Computing where the topics covered wereCloud Security, Alliance Introduction, Cloud Computing, Cyber Security Domains and Career Map, Cyber Security skill sets and Industry Outlook, Hacking Demo (VAPT).The success of the event was reflected by 252 odd enthusiastic participants. The key differentiator of the workshop had been few hands-on demos with extensive question-answer session.

Faculty Coordinator: Kaustuv Bhattacharjee, Ankur Biswas

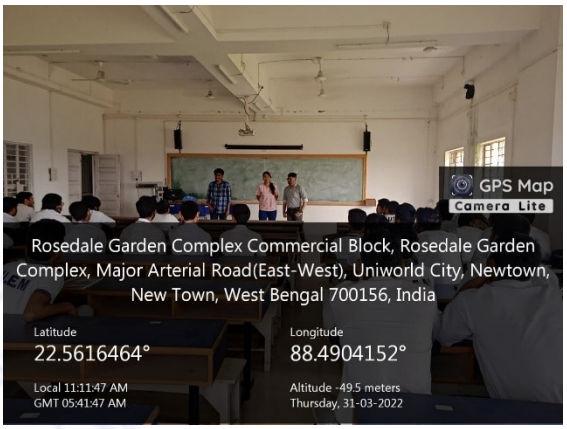
Alumni Lecture Series

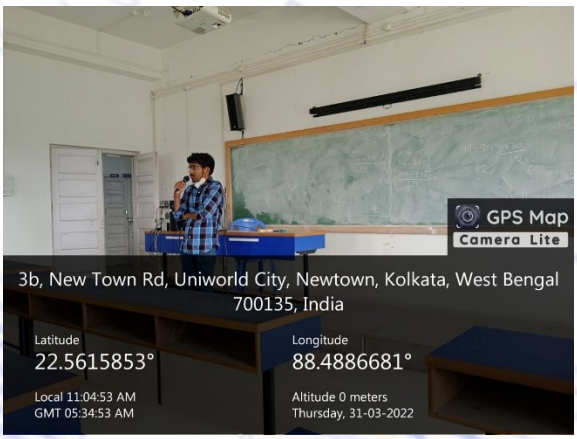
Date :31st March, 2022
Organized By : Department of Computer Applications (CA)
Type of Event :Lecture Series

Department of Computer Applications (CA) organized Alumni Lecture on "*How to prepare yourself for Industry*" on 31st March, 2022 Thursday, 11 AM.

Mr Moudeep Bhattacharya, Ms. Natasha Mondal and Mr. Mainak Banerjee are Alumni of UEM Kolkata MCA 2018 passout batch. They are currently working as Associate Analyst at Deloitte. Their deliberation on the topic "*How to prepare yourself for Industry*" has created tremendous enthusiasm among the 50+ MCA students of 2nd year and first year. The interactive session helped the participants to clarify several doubts about job readiness, joining preparation and formalities, project allocation and many such queries.

Industry demands a different mindset from their employees in terms of stringent discipline, punctuality, team work, coordination among peers, open minded discussion with peers, time bound deliverables and many such requirements. Not all such aspects can be understood by students in the academic arena. The three Alumni through their deliberation focused on exactly this aspect to guide the juniors to get ready for the future endeavor in the Corporate World.





Faculty Coordinator: Prof. Kaustuv Bhattacharjee/Prof. Poulomi Ghosh

Departmental Farewell-CA 2022

Date: 21st July, 2020

Organized By: Department of Computer Applications (CA)

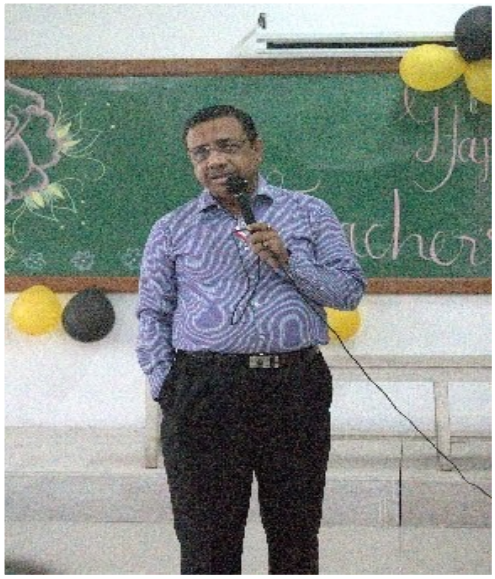
Type of Event: Farewell

Department of Computer Applications (CA) organized departmental farewell for outgoing MCA pass out batch 2022 on 7th June, 2022.

The program was graced by the Head of the Department and all the faculties of . Passout students shared their nostalgic memories of past years of association with UEM Kolkata. There had been photo session, some cultural program and talks by students and teachers. The students are presented with a Memento followed by lunch.

CELEBRATION OF TEACHERS' DAY

The event, together organised by the CR's of MCA 1st & 2nd years, was full of entertainment. All of it including dancing, singing and poetry, was of the utmost quality, and was a joy to watch for all present there.



Our CA Department had their own Teachers' Day celebration in the presence of our respected Vice Chancellor, Dr. Sajal Dasgupta, along with our beloved faculty of the CA Department.

The hosts kept the energy up high as the audience even jammed together on some fan favourite songs together. The faculty were very impressed by the series of performances put on display and the whole event therefore came up as a huge success.

COLLEGE ACHIEVEMENTS

यूइएम को मिला देश में दूसरा स्थान

कोलकाता. यूनिवर्सिटी ऑफ इंजीनियरिंग एंड मैनेजमेंट, कोलकाता ने इंडिया इंटरनेशनल साइंस फेस्टिवल 2021 (आइआइएसएफ 2021) में नेशनल डिफेंस टेक्नोलॉजिस डोमेन में देश भर में दूसरा स्थान हासिल किया है. आइआइएसएफ 2021 गत 11 से 13 दिसंबर के बीच गोवा में आयोजित हुआ था. पश्चिम बंगाल से यूइएम कोलकाता को ' दे डेटा गार्ड' परियोजना के जरिये सफलता मिली. यूइएम के संदीप सिंह, स्नेहा भार्गव, गौरव पाठक, खुशी दुगड़ और आरिफ मोहम्मद ने प्रोफेसर सुमित आनंद व प्रोफेसर अनिर्बान दास की मेंटरशिप में कई महीनों तक मेहनत की.

INDIA INTERNATIONAL SCIENCE FESTIVAL

INDIA'S BEST UNIVERSITY RANKING BY INDIA TODAY

UEMK ranked 56 by India Today in the list of India's Best University Ranking 2022.

ECONOMIC TIMES
Engineering College Rankings

UEMK ranked 2nd in the list of West Bengal's Top 10 Private Engineering college by Economic Times on 22nd July, 2022.

TIMES B-School Rankings 2022

UEMK ranked 3rd in Kolkata and 5th in East Zone.

STUDENT ACHIEVEMENTS

INDIA INTERNATIONAL SCIENCE FESTIVAL

CYPHER

1st position:

Ankita Roy

2nd position:

Ritik Raj

3rd position:

Shreya Chatterjee

ICL 2021 2nd Runner Up

HACKATHON 2022

was organized by Kolkata Police and IEM Labs (the startup corporate body of IEM and UEM group) at Netaji Indoor Stadium on 29th July 2022.

Results:(Within TOP 10, UEM:4)

Anuska Mukherjee

Muskan Patel

Rank 6 UEMK: Stealth

Harsh Gupta

Sandeep Singh

Rank 9 UEMK: Xploiters

Aditi Prasad

Rank 10 UEMK: Sharingan

Gaurav Pathak

X-MIND (MCA 1ST YEAR)

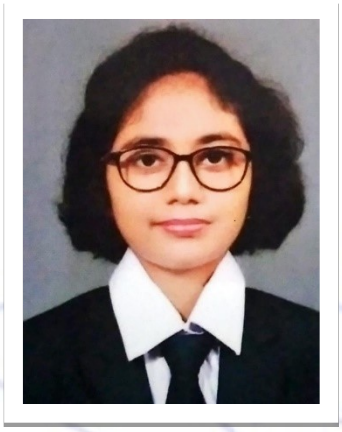
1st position: Rahul Mondal

2nd position: Riddhiman Mondal

3rd position: Ravi Ranjan

X-MIND (Rest of the Batch)

1st position:
Pratik Mukherjee

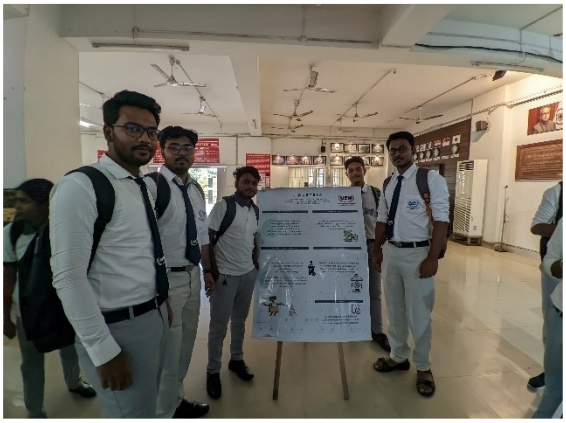


2nd position:
Sneha Das

3rd position:
Kritika Sarawgi

POSTER MAKING COMPETITIONS

1st position-I DUSTBIN



CYBER SECURITY PROJECT COMPETITION

Ritik Raj (**1st position**)

PLACEMENT CELL

STUDENTS	COMPANIES
ABHISHEK CHAUDHARY	WIPRO
ADITYA SINGH	WIPRO
AINESH DUTTA	WIPRO
AKASH ROY	DELOITTE
ANANYA GHOSH	INFOSYS, COGNIZANT
ANIKET DAS	DELOITTE
ARINDIP DUTTA	WIPRO
DIVYA SHIKHAR MANRAL	WIPRO
IPHSHITA SEAL	LARSON AND TOUBRO INFOTECH
KHUSHI KUMARI SINGH	DELOITTE
KSHITIJ RAJ	DELOITTE
MANTHAN LASKAR	INFOSYS, LARSEN AND TOUBRO INFOTECH
MATRIKA CHETTRI	WIPRO, INFOSYS, COGNIZANT
MOUBANI KUCHLYAN	WIPRO, ACCENTURE
MOUMITA DE	DELOITTE, SAPLABS, WIPRO, INFOSYS
MUBASHIRA RAHMAN	DELOITTE, INFOSYS, COGNIZANT
NIRJHAR DAS	DELOITTE
PRITHA CHATTERJEE	DELOITTE
RAIMA GHOSH	DELOITTE, WIPRO, INFOSYS, COGNIZANT, CAPGEMINI
RAJ GUPTA	DELOITTE, WIPRO
RAJIB JOARDER	WIPRO, TCS

STUDENTS	COMPANIES
RIYA DEB	SAPLABS, WIPRO, INFOSYS
RITAM CHATTERJEE	DELOITTE, WIPRO, ACCENTURE
RAJIB KUNDU	DELOITTE
SAGNIK DEY	TCS
SAIKAT SARKAR	DELOITTE, WIPRO
SANJUKTA NAG	WIPRO, INFOSYS, COGNIZANT
SAPTAK MONDAL	DELOITTE, WIPRO
SHIWANI KUMARI	LARSEN AND TOUBRO INFOTECH, CAPGEMINI
SITAL BARIK	DELOITTE
SNEHA PAL	COGNIZANT
SOUMASIS PAL	WIPRO
SOUMILI DAS	DELOITTE
SOUMMO DIP SAHA	DELOITTE, WIPRO, ACCENTURE
SOUMYA GOSWAMI	DELOITTE
SOUMYAJJAL DAS	DELOITTE, WIPRO
SOUMYODIP MUKHERJEE	WIPRO
SOURASHREE BHATTACHARJEE	DELOITTE
SOUVIK GHOSH	INFOSYS, LARSEN AND TOUBRO INFOTECH
SUBHAM ACHARYA	DELOITTE, WIRPO
SUBHRAJYOTI MONDAL	LARSEN AND TOUBRO INFOTECH
TUSHAR KUMAR SINGH	DELOITTE, WIPRO, INFOSYS, COGNIZANT
VISHAL PARUI	WIPRO

And many more...


UEM
UNIVERSITY OF ENGINEERING & MANAGEMENT
INSTITUTE OF ENGINEERING & MANAGEMENT
UNIVERSITY OF ENGINEERING & MANAGEMENT
OPTRONIX-2016