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INFORMATION SCIENCE AND ENGINEERING

# NEWSLETTER



JANUARY - JUNE 2023

### ABOUT THE DEPARTMENT





Information Science Engineering department focuses on Information Technology trends, and Domain Specific Applications. The program facilitates the evolution of skills in students to help them attain a higher degree of knowledge, competency and excellence, for the betterment of the society. The Department of Information Science and Engineering at NHCE was established in the year of 2001 and offers graduate, post graduate and PhD programs. The four year B.E degree equip the students to meet day-today Technological advancements of the ever dynamic IT field through adept training on various subjects of curriculum of Science Information and and beyond. engineering The department offers B.E program through autonomous scheme from the year 2015. The department has a very good team of highly qualified and talented faculty members includina Professors, Associate Professors and Assistant Professors.

#### **VISION**

To emerge as a Department of eminence in Information Science and Engineering in serving the Information Technology industry and the nation by empowering students with a high degree of technical and practical competence.



#### **MISSION**

- To strengthen the theoretical, practical and ethical dimensions of the learning process by fostering a culture of research and innovation among faculty members and students.
- To encourage long-term interaction between the academia and industry through their involvement in the design of curriculum and its hands-on implementation.
- To strengthen and mould students in professional, ethical, social and environmental dimensions by encouraging participation in co-curricular and extracurricular activities.



#### **MESSAGE FROM PRINCIPAL**



It gives me great pleasure to give my best wishes to i-News, a newsletter from the Department Of Information Science and Engineering Of New Horizon College Of Engineering, Bengaluru. The students and faculties of the department are always proactive in taking initiative in organizing all kinds of events. I congratulate all achievers, contributors and editorial board for bringing out such an informative newsletter. I hope this newsletter reflects all activities Of the department and inspires Others to do their best

#### **MESSAGE FROM HOD**



Welcome to i-News, the pulsating heartbeat of the ISE Department at New Horizon College of Engineering, Bengaluru. Our dedicated team of teachers and students have crafted this newsletter to showcase our remarkable achievements and vibrant activities. Within these pages, you'll discover a world of opportunities for students to engage in curricular, cocurricular, and extra-curricular activities through our various clubs. We celebrate milestones, share captivating projects, and highlight the spirit of our department. To our students, seize the gift of today and make it extraordinary. Congratulations to our faculties and editors for creating an exciting and interesting issue. Join us on this captivating journey as we shape the future together. Welcome to i-News, where possibilities come alive.



INFORMATION SCIENCE AND ENGINEERING -

## **CLUB ACTIVITES**



#### **I-SWET**



The event "TECH MOJ" was conducted on 25th April,2023 at NHCE under the department of Information Science and Engineering. The event started at around 11 a.m. where about 40 students from various departments participated enthusiastically.

The first round "LOGICIZE" was a fun problem solving round with multiple logical and analytic questions. It also included brain teasers and crosswords. The first round was conducted in teams of two and a total of 20 teams participated. The second round "INSCRIBE" was a technical round with a total of five coding questions of moderate difficulty.

For the first round the participants were given 40 minutes in total to solve all the puzzles and problems. Top 12 participants (6 teams) were qualified for round two. The second round was an individual round where each participant was challenged with five coding questions. The participants could solve these problems in a language of their choice.

The winners of both these rounds were selected based on the speed, correctness and accuracy of the solutions. The winners were awarded with certificates and trophies. All in all the event was a hassle free event with significant participation and cooperation from all the participants.

#### I-SWET



The expert talk "EMERGING TECHNOLOGIES AND CAREER GUIDANCE" was conducted on 23rd May, 2023 at NHCE by the department of Information Science and Engineering in coordination with iSWET(G) club.

The speakers Ms. Pratikshita Chowdhary and Ms.Chhavi Kumar- Senior Executives from "One million for one billion" embarked on leadership skills, soft skills, Metaverse and related technologies like Artificial Intelligence, Virtual Reality and Augmented Reality; their applications and future growth. The session was highly informative and helpful for all the students





#### **I-SCRUM**





The i-SCRUM club of Department of Information Science and Engineering conducted a seminar on "The Fundamentals of Research and steps in Research process". The event was held on the 18th of April 2023 from 11:00 a.m. to 1:00 p.m. The seminar was conducted for undergraduate students of all the departments. The event had an active student participation of more than 70 students.

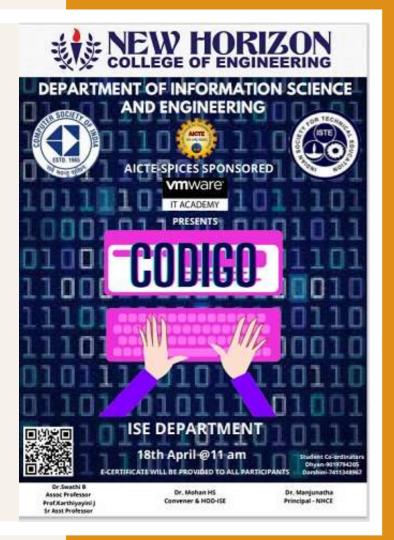
#### **I-SCRUM**



The i-SCRUM club of Department of Information Science and Engineering organized an industrial visit to Defence Research and Development Organization on 19th May 2023.

The objective of the industrial visit was to understand the role of DRDO-ADE in enhancing the defence capabilities of the nation and to observe the state-of-the-art facilities and infrastructure available at the establishment. The industrial visit started with a brief introduction to DRDO-ADE, its history, and its contributions to aeronautical research. The participants were then divided into smaller groups and assigned guides who accompanied them throughout the visit. The industrial visit to DRDO-Aeronautical Development Establishment proved to be an enriching experience for the participants.

#### **VMWARE**



The event **Código** was conducted on 18th April, 2023 under VMware IT Academy Club, an intra-collegiate technical event held by the Information Science & Engineering department.

The entire event was based on problem solving ability, memorization skills and also focused on technical knowledge. The event consisted of technical, analytical and exclusive coding rounds.





#### **VMWARE**



The workshop on "INTRODUCTION TO BLOCKCHAIN- HOW TO CREATE A SMART CONTRACT" was conducted on 19th May, 2023 under VMware IT Academy Club of the Information Science & Engineering Department.



The event was designed to provide participants a comprehensive understanding of blockchain technology and hands-on experience in creating smart contracts. Smart contracts are self-executing agreements with predefined conditions and actions that are stored on a blockchain. This workshop guided the participants through the process of designing, developing, and deploying smart contracts using a popular blockchain platform



INFORMATION SCIENCE AND ENGINEERING

# **NHBYTES**





INFORMATION SCIENCE AND ENGINEERING

# JANUARY



### TECH TARGET 2023

"TECH TARGET", a coding contest held on January 14, 2023, by NHCE-ISTE Student chapter under the Department of Information Science and Engineering in association with Indian Society for Technical Education with over 160 participants in two rounds: Prelims and Finale

contest assessing critical thinking and technical skills had two rounds. In the 'prelims,' participants tackled 3 medium difficulty questions in 60 minutes. The top 29 moved to the 'finale,' facing 2 medium and hard questions in another 60-minute round. Winners were chosen based on speed, correctness, and accuracy, receiving certificates and mementos. The Tech-Target concluded smoothly with participant cooperation.

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING INDIAN SOCIETY FOR TECHNICAL EDUCATION **NHCE - ISTE STUDENT CHAPTER PRESENTS** TECH – TARGE First Round Second Round (2pm - 4pm) (10am - 12pm) PRELIMS FINALE January 2023 Platform: Hackerrank Free Registration **Exclusive Rewards for Winners** Prof. Latha S S Dr. Mohan H S Dr. Manjunatha Convener & HOD - ISE Department of ISE NHCE NHCE For more details: Surya S: 76191 66171

Winners of the contest First Place: Hemasagar N M

Second Place: Amogh Bharadhwaj

### EXPERT TALK ON "IT INDUSTRY AND ITS EVOLUTION"

The Department of Information Science and Engineering conducted an Industry Expert Talk on "IT Industry and its Evolution" for 3rd-semester students on January 6, 2023, in online mode. Dr. Mohan H S supervised the session, featuring expert speaker Mr. Asim Parveez

Mr. Asim Parveez, a Technical Account Manager at Chargebee Technologies, Bangalore, expertizes in testing, bug tracking, and automation, spoke on the topics

- Evolution of IT
- •Growth concerned to various electronic and software applications
- Future Technologies
- •Jobs and Internship analysis using social networking sites



The resource person shared insights with students about the IT industry, spanning from its inception to the present era. Emphasizing the shift towards application-based learning, they discussed the profound impact of IT industries on individuals. Guidance on job and internship searches, leveraging platforms like LinkedIn, clarified concepts for students.

#### **ALUMNI TALK ON "VIEWS ON LEADERSHIP**"



The Department of Information Science and Engineering organized an Alumni talk on "VIEWS ON LEADERSHIP" for 5th-semester students on January 6, 2023. Dr. Mohan H S supervised the online session, featuring expert speaker Mr. Prashant V.

The Speaker, a 2013 batch alumnus, currently serves as a Program Manager at Trinity Mobility, Bangalore. Previously a Technical Project Manager at Hewlett Packard Enterprise, Bangalore, he specializes in R Programming, PowerBi, SharePoint Designer, and Web Development (HTML, PHP, CSS, JavaScript, React), with extensive project involvement in Cloud migration and Machine

Learning.



The topics he covered included: Inspiration, Strategic & Critical Thinking, Interpersonal Communication, Authenticity & Self-Awareness, Open-Mindedness & Creativity, Flexibility, Responsibility & Dependability and last but most importantly, How to build a career in Artificial Intelligence.

The program provided students insights into the future scope of Artificial Intelligence.



INFORMATION SCIENCE AND ENGINEERING

# **FEBRUARY**



# EXPERT TALK ON "PROCESS OF INNOVATION DEVELOPMENT, TECHNOLOGY READINESS LEVEL (TRL), COMMERCIALIZATION OF LAB TECHNOLOGIES & TECH-TRANSFER"

Department of Information Science and Engineering along with IIC conducted an Expert talk on "Process of Innovation Development, Technology Readiness Level (TRL), and Commercialization of Lab Technologies & Tech-Transfer" on 23.2.2023 for the 3rd semester students. The session was handled by Dr. C.R. Rathish, Associate Professor, Computer Engineering, NHCE. Dr. Mohan H S, HOD, Information Science and Engineering Department welcomed the gathering and introduced the speaker of the day. The Speaker gave an insight on the Innovation, Incubation, Commercialization and Tech Transfer of our labs with the following objectives.

- Understood the innovation process
- Became familiar with the concept of Technology Readiness Level (TRL)
- Identified the challenges of commercializing lab technologies
- Learned about the importance of tech-transfer



#### VEER SHIVAJI DIWAS

i-SCRUM and i-SWET club of Department of Information Science and Engineering celebrated "Birthday of Chhatrapathi Shivaji Maharaj" on 20th February 2023 from 11:00am -4:30pm. The event was inaugurated by Dr. Sanjeev Sharma, Professor & Dean – QASDC, NHCE. Deans, HODs, Faculty Members and students from various departments attended the program. On occasion of the program Elocution on Chhatrapati Shivaji Maharaj is conducted for students of NHCE. The best three speeches had been awarded with a certificate and a token of appreciation.

The winners of the elocution competition held on Veer Shivaji Diwas is listed below.

- Khushi Shrimali (1NH22AS078) from Applied Science Department
- Anish B (1NH22ÈC139) from Applied Science Department
- Harshith Tiwary (1NH21CE022) from Computer Engineering Department



#### **TEDX EXPERT TALK**

The Department of Information Science and Engineering has conducted TEDx Expert Talk on "How will you Measure your life" by Clay Christensen, "Become the person you cant imagine" by Norman Bacal and "How to figure out what you really want" by Ashlev Stahl 2nd of February, 2023 from 10:00 AM to 10.30 AM (Venue: Class room C523, C524, C509) FOR all the 3rd Semester students under the supervision of ISE Head of the department, Dr. Mohan H S in online mode..





INFORMATION SCIENCE AND ENGINEERING -

# MARCH



### INDUSTRIAL VISIT AT IISC BANGALORE

The Department of Information Science and Engineering students have visited IISc Bangalore on 04-March-2023 as a part of Industrial visit (Study Tour) to explore and experience the real work in the different departments. Visited the different departments and interacted with professors and department in charge to understand the works carried out in each department.



At Around 40 students were visited along with Dr.Arvind S. Kapse, Professor, ISE, NHCE, Bengaluru. The students visited Supercomputer Education And Research Centre, Computational and Data Sciences (CDS) Department, Computer Science & Automation (CSA) department etc. This study tour will definitely helpful for us and will try to implement the best practices in our department.

### INDUSTRIAL VISIT AT BLUELEARN PVT LTD. BENGALURU

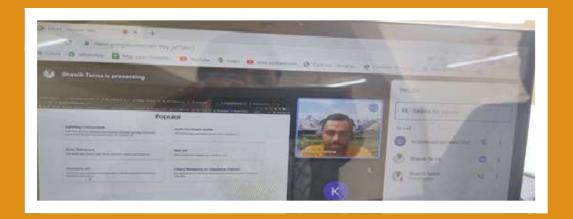
The Department of Information Science and Engineering students have visited Bluelearn PVT LTD, Bengaluru. It is one of India's largest and smartest student community that enables students to learn new skills, grow their network, and get amazing opportunities in careers on 27-March-2023 as a part of Industrial visit (Study Tour) to explore and experience the real work in the industry.



Around 40 students were visited along with Dr.Arvind S. Kapse, Professor, ISE, NHCE, Bengaluru. This study tour will definitely help the students to understand the working culture of industry.

### **ALUMNI TALK: CAREERS IN SALESFORCE**

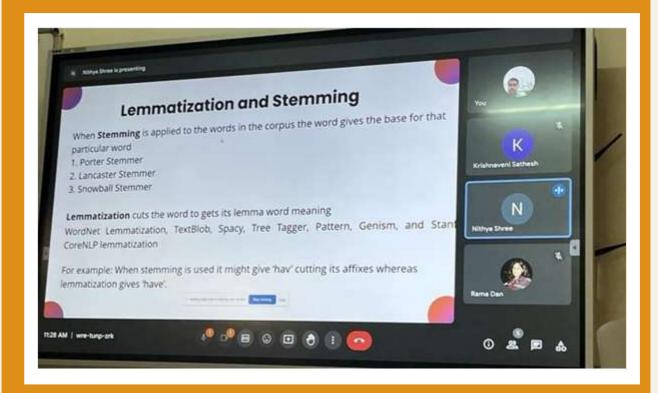
The department of Information Science and Engineering has conducted Alumni talk on the topic "CAREERS IN SALESFORCE" for the 8thsemester students on the 17th of March, 2023 under the supervision of ISE Head of the department, Dr. Mohan H S online. The expert speaker, Mr.Bhawik Tannawas invited to conduct the same.



The speaker is currently working as a Software Engineer, Akamai Technologies, Bangalore. He had also worked as a Senior Analyst, Capgemini Technology Services, Mumbai, Maharashtra. He has best experience on the Data Structures, MySql, HTML, CSS, Javascript, React JS.He also has involved in development of many projects in the field of Employee Voucher Request System

### ALUMNI TALK: NATURAL LANGUAGE PROCESSING

The department of Information Science and Engineering has conducted Alumni talk on the topic "NATURAL LANGUAGE PROCESSING" for the 6thsemester students on the 25th of March, 2023 under the supervision of ISE Head of the department, Dr. Mohan H S online. The expert speaker, Ms.Nithyashree Gunjur Suresh was invited to conduct the same.



The speaker is currently working as a Software Engineer, Lowe's India, Bangalore. She had also worked as a Data Science Project Intern, Indian CST, Bangalore. She has best experience on the Data Science, Artificial Intelligence and C, C++, Python, Java, JavaScript, SQL, GraphQL.



INFORMATION SCIENCE AND ENGINEERING —

# APRIL



### ALUMNI TALK - STUDY ABROAD - TRENDS AND CHALLENGES

The department of Information Science and Engineering has conducted Alumni talk on the topic "Study Abroad - Trends and Challenges" for the 6thsemester students on 21st of April, 2023 under the supervision of ISE Head of the department, Dr. Mohan H S offline. The expert speaker, Ms. Priyanka Guntur, 2014-2018 batch student of ISE Department was invited to conduct the same.



Ms. Priyanka Guntur is a Project Management Graduate, HumberCollege, Canada. She had also worked as a Senior Technical Analyst, IBM, India. She did certification on Project Management Orientation (LMS- PM54G) and Project Management Specialization (URL-486BB715DDBE). She also has involved in development of many projects in the field of Cloud migration and Machine Learning.

# EXPERT TALK - AWARENESS ON INTELLECTUAL PROPERTIES RIGHTS AND APPLICATION FILING

The Department of Information Science and Engineering has conducted Expert Talk on the topic "Awareness on Intellectual Property Rights and Application filing" for the 6th semester students on the 13th of April, 2023. The Expert speaker, Ms. Sabari Banu was invited to conduct the same.

The Department of Information Science and Engineering has conducted Expert Talk on the topic " Awareness on Intellectual Property Rights and Application filing" for the 6th semester students on the 13th of April, 2023



The Expert speaker, Ms. Sabari Banu was invited to conduct the same.
The Speaker, Smt. Sabari Banu is currently working as Women Scientist and IPR Scientist, Government NIPAM Volunteer, Wise Kiran IPR DST, New Delhi.

#### **TOPICS COVERED:**

- •Invention of a new Product
- •How to introduce the product?
- •Different approaches to get patents and rights.

The resource person shared her knowledge to the students about the various steps involved in getting patent rights and its importance, Case Study was given to the students to share their ideas in inventing a new product.

#### PARENT TEACHERS MEETING



The ISE Department at New Horizon College of Engineering organized a Parent-Teachers meeting on April 13, 2023, in the ISE Department Library and classroom. Held at 10:30 am in Chatrapathy Shivaji Block, NHCE, the meeting aimed establish common platform for teachers and parents enhance educational students' experiences and discuss various issues related to their all-round development. Dr. Mohan H S, HOD, Department of Information Science & Engineering, guided the meeting, with teachers, 6th and 8th Semester in attendance.

The agenda of the meeting:

- Welcome note by HOD Dr. Mohan H S and introduction of teacher's to parent.
- Convey the vision, mission, PEOs and PSOs of the department
- To provide information about various student oriented activities and schemes run by college.
- Suggestion from parents.
- Hi-Tea.
- Parent Teacher Interaction.

Parents were satisfied and expressed their gratitude for the meeting and requested for such many meeting in future.

#### **TECHMOJ**

The event "TECH MOJ" was held on April 25, 2023, at NHCE, organized by the Department of Information Science and Engineering. Starting at 11 a.m., the event drew enthusiastic participation from about 40 students across various departments.

Comprising two rounds, the first round, "LOGICIZE," was a fun problem-solving session with multiple logical and analytic questions, brain teasers, and crosswords. Conducted in teams of two, 20 teams participated, with a total of 40 minutes allotted. The top 12 participants (6 teams) moved on to the second round, "INSCRIBE," which featured five coding questions of moderate difficulty. This round was an individual challenge, allowing participants to solve problems in a language of their choice.

Winners were determined based on speed, correctness, and accuracy, receiving certificates and trophies. The hassle-free event saw significant participation and cooperation.

The winners were:

1st Place: Rohith Rajendran

2nd Place: Sudeep M Arashingod

3rd Place: Amogh B





#### SEMINAR ON "FUNDAMENTALS OF RESEARCH AND STEPS IN RESEARCH PROCESS"

The i-SCRUM club of the Department of Information Science and Engineering organized a seminar on "The Fundamentals of Research and Steps in the Research Process" on April 18, 2023, from 11:00 a.m. to 1:00 p.m. The seminar, open to undergraduate students from all departments, witnessed active participation from over 70 students.



Saira Banu Atham, Dr. resource person, with over 20 years of academic experience and currently the HOD at Presidency University, Bengaluru, provided comprehensive insights into the research process. The seminar topic, formulating research questions, and developing a hypothesis. Emphasis placed on conducting literature reviews, various research methods for data collection, and understanding data analysis steps statistical techniques.

Dr. Saira Banu also discussed the paramount significance of meticulously crafting a wellstructured research paper.

She offered comprehensive guidelines for effective research paper composition, ensuring that the seminar not only enriched students with knowledge but also equipped them with invaluable skills for conducting research.

#### **DEFENDX**

The event "DEFENDX" on April 27, 2023, at NHCE, organized by the Department of Information Science and Engineering in coordination with the i-CSEH club, featured Mr. Soumen Joarder, Associate Principal Consultant in Synopsys Software Integrity Group.

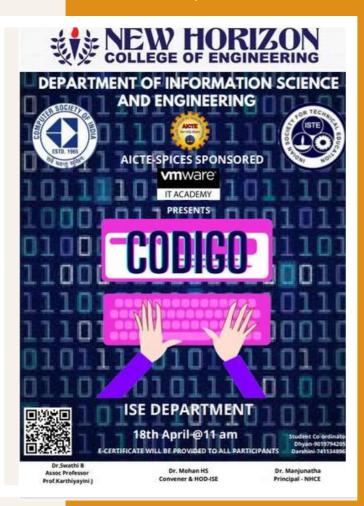
n the initial hour, Mr. Joarder introduced cyber security, emphasizing crucial online safety practices. The subsequent practical session, extending for an hour, included hands-on training on intercepts and comprehensive instruction on executing injections. This workshop not only provided theoretical knowledge but also equipped students with practical skills for understanding and addressing cyber security challenges effectively. interactive nature of the session facilitated an engaging learning experience, fostering a deeper understanding of cyber security concepts among the participants.



In conclusion, DEFENDX heightened cyber security awareness and empowered participants with essential practical skills. The interactive workshop, led by Mr. Soumen Joarder, left an indelible impact, fostering a community adept at addressing digital challenges. Insights gained will contribute to creating a more secure and knowledgeable online community.

#### **CODIGO**

The event "Código" took place on April 18, 2023, under the VMware IT Academy Club, organized by the Information Science & Engineering department. Starting at 11:00 a.m., the event saw enthusiastic participation from 60 students across various departments. The intra-collegiate technical event comprised two rounds, focusing on problem-solving, memorization, and technical knowledge.



The event, which centered on problem-solving, memorization, and technical knowledge, commenced with its first round in an ISE department classroom. In this individual technical round, the 60 participants faced the challenge of memorizing and solving a diverse set of technical and analytical questions. The top 30 participants advanced to a subsequent sub-round, intensifying the competition and leading to the final selection of 16 participants for the next stage

Moving on to the second round, participants engaged comprehensive coding challenge. Workina teams ot two, they collaborated to solve questions on the HackerRank platform. The top-performing tour teams were recognized certificates and exciting gifts, marking the culmination of the event with a sense of achievement and celebration

The Winners are:

1st place – Niranjan.J & Mohammad shareef 2nd place – Kamboji Akhilesh & Lokesh prasad 3rd place – Sai Sourabh & Hari Krishna





INFORMATION SCIENCE AND ENGINEERING —

# MAY



#### **SECURE TRIVIA**

The event "SECURE TRIVIA" was conducted on 17th May, 2023 at NHCE under the Department ofInformation Science and Engineering in coordination with i-CSEH club. The event conducted SecureTrivia, was a 2-round event in which each round revolved around a common premise/theme of decryption of a given code using varying methods. The theme of the event was "Unity".

From beginning to end, the event lasted four hours. The first round consisted of deciphering a set of alphabets by acquiring values from a for-loop. The second round included deciphering of alphabets as well as numbers by trial and error to form meaningful answers. Both rounds had to be completed under a time crunch



COLLEGE OF ENGINEERING

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING
In association with CyberSecurity and Ethical Hacking Club

COLLEGE OF ENGINEERING
In association with CyberSecurity and Ethical Hacking Club

PRESENTS

PRESENTS

THEME: UNITY

ROUND 1: SYNERGY

ROUND 2: COHESION

THEME: UNITY

ROUND 2: COHESION

THEME: UNITY

ROUND 3: SYNERGY

PRINCIPLE OF MOHAN H.S.
Comvener & HOD-ISE
NHCE

Principal
NHCE

Student co-ordinators:
Sworthi-80780 30178
Krishno-79938 89672

Winners are: 1st place - Jagruth P 2nd place - Anish Raj Gopal Rai 3rd place - S Harsshitha

# WORKSHOP ON INTRODUCTION TO BLOCKCHAIN

The workshop on "INTRODUCTION TO BLOCKCHAIN- HOW TO CREATE A SMART CONTRACT" was conducted on 19th May, 2023 under VMware IT Academy Club of the Information Science & Engineering Department



Workshop Overview: Creating Smart Contracts is designed to provide participants with comprehensive understanding blockchain technology and handson experience in creating smart contracts. Smart contracts are selfagreements executing predefined conditions and actions that are stored on a blockchain. workshop will participants through the process of developina, designing, and deploying smart contracts using a popular blockchain platform.

This immersive experience equipped participants with valuable insights into blockchain technology, fostering a deeper understanding of designing and deploying smart contracts.

## EXPERT TALK - OVERSEAS EDUCATION

The Department of Information Science and Engineering conducted Expert Talk on the topic "Overseas Education" for the 6th-semester students on the 8th of May, 2023 under the supervision of ISE Head of the department, Dr. Mohan H S in offline mode. The Expert speaker, Mr. Nanjappa along with his team members MsBhanushree and Ms Afshan were invited to conduct the same

The Speaker, Mr.Nanjappa is currently working as Marketing Manager, at Edwise International Consultants, Bangalore. Where they provide information regarding higher education in various countries such as the UK, USA, Canada, Australia, New Zealand, Singapore, Ireland, France, Germany, Dubai, Switzerland, Malaysia, and many more.



#### **TOPICS COVERED:**

- Academic Pathway Planning.
- Assisting in understanding various Visa processes.
- Complete assistance on travel, accommodation, and foreign exchange The resource person shared his knowledge with the students about the various services of Overseas Education and how Edwise Consultants can guide the students to pursue their higher studies abroad with scholarships and part-time work for students.



INFORMATION SCIENCE AND ENGINEERING -

# JUNE



## EXPERT TALK - MERN FULL STACK WEB DEVELOPMENT

The Department of Information Science and Engineering has conducted Guest Lecture on the topic "Mern Full Stack Web Development" for the 4th semester students on the 14th of July, 2023 under the supervision of ISE Head of the department, Dr. Mohan H S in offline mode. The Expert speaker, "Mr. Mr.Raghu Prasad" was invited to conduct the same.

The Speaker, Mr. Mr.Raghu Prasad is CEO, Kaushalya Technologies, Bangalore, who examines the puzzle of motivation starting with a fact of how to invent a product.



#### **TOPICS COVERED:**

- •Invention of a new Product in Full Stack
- •How to include hardware central processing unit?
- Different approaches to get redundancy, Security.

The resource person shared her knowledge to the students about the various services related to full stack development that includes both the front end and back end of an application. The front end is usually accessed by a client, and the back end forms the core of the application where all the business logic is applied.

#### PARENT TEACHERS MEETING

The Department of Information Science & Engineering, New Horizon College of Engineering has organized a Parent-Teachers meeting on Thursday, 22nd July 2023 in ISE Department Library and class room, Chatrapathy ShivajiBlock, NHCE at 10:30 am. The main purpose of the meet was to create a common platform, where teachers and parents come together to enrich the student's educational experiences and discuss variety of issues, regarding all round development of the students.

The meeting was organized under guidance of Dr. Mohan H S, HOD, Department of Information Science & Engineering Teachers, mentors and parents of 4th Semester attended the meet.

The agenda of the meeting:

- Welcome note by HOD Dr. Mohan H S and introduction of teacher's to parent.
- Convey the vision, mission, PEOs and PSOs of the department
- To provide information about various student oriented activities and schemes run by college.
- Suggestion from parents.
- Hi-Tea.
- Parent Teacher Interaction.



Parents of 4th semester students attended the meeting. Class teachers interacted with each parent and discussed their ward's marks, behavior, regularity, and discipline in the department. Parents was satisfied and expressed their gratitude for the meeting and requested for such many meeting in future.



INFORMATION SCIENCE AND ENGINEERING

# **ARTICLES**



#### PROS AND CONS OF USING TABLEAU

#### What is Tableau?

Microsoft Azure is a cloud computing platform and service provided by Microsoft. It offers a wide range of cloud-based services, including virtual machines, storage, databases, networking, analytics, AI, and more. Azure enables organizations to build, deploy, and manage applications and services on a global scale, utilizing Microsoft's data centers located worldwide.

Features of Tableau are:

- Real-time analysis
- Collaboration of data
- Data Blending

#### **1Why Learn Tableau?**

Tableau is emerging as one of the hottest trends in <u>business intelligence</u> in 2019. It offers a multitude of benefits to companies that use it for their business analytics needs. Let's discuss the pros and cons. There is a huge demand for Tableau experts also there are huge rewards on offer as well.



The average salary for a Tableau developer is S75,401 per Payscale. Also, top companies like Dell, General Motors, Sony Electronics, etc looking for Tableau talent. So what are you waiting for? Many professionals are <u>learning Tableau</u> to upskill themselves.

#### PROS AND CONS OF USING TABLEAU

#### Advantages of Tableau:

#### i)High Performance:

Users rate Tableau's overall performance as strong and secure. It can handle millions of rows of data with ease. The huge advantage of having Tableau is different types of visualization can be created at one shot.

#### ii) Mobile-friendly:

There is an accomplished mobile app available for IOS and Android which adds mobility to Tableau users and allows them to keep statistics at their fingertips. The app supports practically that a desktop and online version has.

#### iii) Extensive Customer Resources:

Tableau community is engaging and enthusiastic. It has various comprehensive online resources, guides, training, and online forums, etc.

#### iv)Excellent Mobile Support:

Tableau has a huge percentage of users actively deploying mobile BI. It applies a lot of efforts in building a healthy mobile customer.

#### v)Easy to Upgrade:

Tableau customers are happy with using the latest release of the software because the upgrades are easy to be carried out.

#### vi)Low Cost:

Tableau is relatively a low-cost solution compared to other big data counterparts such as Qlik and Business Objects.

#### vii)Quality Customer Service:

Tableau has user and developer community where the queries are answered quickly.

#### viii)Ease of Use:

It is easy to use since it is simple user interface software. Also, it is simple to drag and drop interface which is very easy to learn



#### PROS AND CONS OF USING TABLEAU

#### Disadvantages of Tableau

Tableau is the leader in the data viz space however, there are some limitations. Let's dive into some tableau limitations:

#### i) Poor Versioning

The main disadvantage of using Tableau is only recent versions supports revision history and for the older one's package rolling back is not possible.

#### ii) No Automatic Refreshing of Reports:

You don't get an automatic option to refresh your reports with the help of scheduling. Therefore, some manual effort required to update the data in back-end.

#### iii) Need Manual Effort:

Tableau's parameters are inactive and only a single value can be selected using a parameter. You need to update it manually whenever the data gets change.



#### iv) Not α Comprehensive Solution

Even if the Tableau Software is easy to use for BI application, still it doesn't provide any platform for developing analytic applications that can be widely shared. Also, it doesn't suit the business that has expanded deployments of broad business.

#### v) No Version Control:

Once the dashboards and reports are published on the server you can't get back to the previous levels of data in Tableau. It is not possible to go back and recover old data.

### HUMAN-MACHINE COLLABORATION: INTEGRATING GENERATIVE AI INTO EVERYDAY LIFE

In the fast-evolving landscape of technology, Artificial Intelligence (AI) has become an integral part of our daily lives. From voice-activated virtual assistants to personalized content recommendations, AI applications have permeated various sectors. However, the current AI systems are often specialized and lack the aptability and comprehensive understanding characteristic of General AI. In this article, we explore the prospect of integrating General AI into everyday life, examining the challenges, opportunities, and ethical considerations surrounding this transformative collaboration.

#### The Current State of AI in Everyday Life:

The prevalence of AI in our daily routines is unmistakable. Smartphones utilize AI algorithms for facial recognition and predictive typing, while virtual assistants like Siri and Alexa respond to our voice commands. Recommendation systems on streaming platforms analyze our preferences to curate content tailored to individual tastes. Despite these advancements, current AI systems are limited in their scope, lacking the broader understanding and adaptability associated with General AI.



### Challenges and Opportunities:

The integration of General Al into everyday life presents both challenges and opportunities. Ethical concerns regarding privacy, bias, and job displacement need careful consideration. However, the potential benefits include enhanced efficiency, convenience, and innovation across various sectors, from healthcare to education.

### HUMAN-MACHINE COLLABORATION: INTEGRATING GENERATIVE AI INTO EVERYDAY LIFE

#### **Human-Machine Collaboration Models:**

Successful integration requires exploring collaborative models where General AI complements human capabilities. Rather than replacing human roles, AI can act as a supportive partner, handling repetitive tasks and providing valuable insights that augment human decision-making.

#### Real-world Applications:

Imagine a healthcare system where General AI assists in diagnostics, education platforms powered by personalized AI tutors, or transportation networks optimized for efficiency and safety through AI-driven traffic management. These scenarios illustrate the transformative potential of General AI in improving our daily lives.

User Experience and Interface Design:

User-friendly interfaces play a pivotal role in facilitating human-Al interaction. Transparent design and fostering user trust are essential components in ensuring widespread acceptance of Al technologies.

#### **Ethical Considerations:**

As we navigate the integration of General AI, addressing ethical considerations becomes paramount. Striking the right balance involves mitigating bias in algorithms, establishing accountability frameworks, and ensuring that decision-making processes are transparent and fair.



### HUMAN-MACHINE COLLABORATION: INTEGRATING GENERATIVE AI INTO EVERYDAY LIFE

#### **Regulatory Frameworks:**

Governments and regulatory bodies play a crucial role in shaping the responsible deployment of General AI. Establishing clear guidelines and standards can help safeguard against misuse and promote ethical practices in AI development.

#### Public Perception and Acceptance:

Public perception profoundly influences the success of integrating General AI. Effective communication and educational initiatives are necessary to demystify AI, fostering understanding and trust among the general population.

#### **Future Outlook:**

Looking ahead, the integration of General AI into everyday life holds the promise of revolutionizing how we work, learn, and interact. As technology continues to advance, a thoughtful and responsible approach is essential to navigate the evolving landscape of human-machine collaboration.



#### Conclusion:

The journey toward integrating General AI into everyday life is marked by challenges, but the potential benefits are transformative. By fostering collaboration, addressing ethical considerations, and embracing responsible development, we can pave the way for a future where General AI enhances our lives in ways we have yet to imagine.

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### QUANTUM CRYPTOGRAPHY: UNVEILING THE UNBREAKABLE CODE FOR A SECURE FUTURE

In a world where data and communication are the lifeblood of modern society, ensuring secure transmission of information has become paramount. Traditional cryptographic methods, while effective, may face significant challenges with the advent of powerful quantum computers. Quantum cryptography, an exciting field at the intersection of quantum mechanics and cryptography, offers a solution that promises to revolutionize data security. In this article, you will explore the fascinating world of quantum cryptography, and its potential to create an unbreakable code for a secure future.

At the heart of quantum cryptography lies the principles of quantum mechanics. Unlike classical cryptographic methods, which rely on mathematical complexity, quantum cryptography leverages the laws of quantum physics to create secure communication channels.

Quantum key distribution (QKD) is one of the primary applications of quantum cryptography. It uses quantum properties, such as the superposition and entanglement of quantum states, to establish a secret key between two parties. This secret key is then used for encryption and decryption of messages, ensuring that even a quantum computer cannot efficiently break the encryption.



In QKD, entangled particles are sent to two distant parties. The quantum states of these particles are used to generate a random secret key. Any attempt to intercept or eavesdrop on the quantum communication will disrupt the entanglement, immediately revealing the presence of an intruder. This property, known as the "no-cloning theorem," ensures the security of the quantum key exchange.

### QUANTUM CRYPTOGRAPHY: UNVEILING THE UNBREAKABLE CODE FOR A SECURE FUTURE

Quantum entanglement, a peculiar phenomenon where the quantum states of two or more particles become interdependent, is the cornerstone of quantum cryptography. When entangled particles are measured, their quantum states instantaneously correlate, regardless of distance.

Quantum cryptography holds the potential to revolutionize secure communication across various domains. One of the most promising applications is in secure communication between government agencies and financial institutions, where the highest levels of data confidentiality are required. Just imagine! All your secrets so secure and accessible only by you and the people you desire to, in this world of gossips.

While quantum cryptography offers a glimpse into a more secure future, it is not without its challenges and limitations. Implementing quantum cryptography requires cutting-edge technology, including specialized quantum devices for generating, manipulating, and detecting quantum states. Additionally, quantum cryptography addresses only the problem of secure key distribution. It does not address other cybersecurity concerns, such as malware, insider threats, or denial-of-service attacks.

As quantum computing continues to advance, the threat it poses to traditional cryptographic methods becomes more pronounced. To protect against this future threat, researchers are actively exploring and developing quantum-resistant cryptographic algorithms, also known as post-quantum cryptography.



### QUANTUM CRYPTOGRAPHY: UNVEILING THE UNBREAKABLE CODE FOR A SECURE FUTURE

Quantum cryptography stands as a beacon of hope in the quest for unbreakable data security. By harnessing the principles of quantum mechanics, this cutting-edge technology offers a paradigm shift in secure communication. Quantum key distribution provides an unhackable method for generating secret keys, guaranteeing secure encryption for data transmission. As research continues and technology evolves, quantum cryptography will undoubtedly play an integral role in ensuring a secure future, where sensitive information remains protected against the most advanced cyber threats, including those posed by powerful quantum computers.



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#### THE CLOUD ERA!

#### What is cloud?

Till 2006, a visible mass of condensed watery vapour floating in the atmosphere, typically high above the general level of the ground was defined to be a cloud. After the advent of the Elastic Compute Cloud by the tech giant Amazon, definition of CLOUD COMPUTING changed to:

"The technology of distributed data processing which provide scalable information resources and capacities as a service to multiple users through Internet."

That means, the delivery of services and resources through internet which includes tools and applications like servers, data storage, networking, etc. For a layman, the storage of data on a remote database rather than local hard drives is termed as a cloud. Any electronic device which has access to internet can access data from anywhere and anytime.



#### **Deployment Models:**

#### 1) Public Cloud:

These are operated by thirdparty companies who handle all the infrastructure to provide services on servers & storage over the internet which may be free of cost or chargeable. Users access their data which can be accessed by anyone in the world. Example: Amazon EC2, Google's App Engine, Blue Cloud by IBM and Azure services platform by Microsoft.

#### THE CLOUD ERA!

- 2) **Private Cloud:** It is a cloud infrastructure operated solely for an organization hosted either internally or externally. Many of them are provided on a private network. Example: Hewlett Packard Enterprise (HPE) -- offers the Helion Cloud Suite software.
- 3) **Hybrid Cloud:** A situation in which a company which operates both public and private cloud services integrated together.
- 4) **Multi Cloud:** An organization may have multiple public, private and hybrid clouds all either connected together or not.

#### **Types:**

- 1) Software as a Service(SaaS): A centrally hosted subscription based on demand software licensing & delivery model. For example: Salesforce, Netflix,etc
- 2) Infrastructure as a Service(IaaS): It essentially offers compute, storage and resources on demand on pay-as-you-go basis. For example: DigitalOcean, Microsoft Azure, Amazon Web Services(AWS),etc.
- 3) Platform as a Service (PaaS):

It provides a platform for development and deployment of applications using resources in the cloud on pay-as-you-go basis. For example: Heroku, Microsoft Azure, etc.

### 4) Backend as a Service (BaaS):

It provides a way to the web and app developers to connect the applications to the backend storage and APIs. For example: Firebase, etc.



#### THE CLOUD ERA!

- 5.) Function as a Service (FaaS): It provides a platform for developing, managing and running applications and its functionalities without the hassle of maintaining the infrastructure used for it. For example: AWS Lambda, etc.
- 6) **Serverless Computing:** It provides resources on demand without the need to rent or maintain virtual machines or servers at the backend

In future, as rightly said by the tech giant Microsoft's CEO Satya Nadella, 'there won't be any particular sector as tech sector'. Complementing that, there won't be any specific use of cloud computing, rather each and every process, product or service will be cloud-based.

This wave has already begun, for example- today everyone uses Google Drive, Microsoft Onedrive, Apple iCloud, etc. for syncing the data on the mobile phone, softwares and tools in major industries have become cloud based and the development & deployment of apps and programs has majorly shifted to cloud.



There are many other instances in today's world where cloud is used, but in the years to come the landscape of cloud will widen so as to increase the efficiency and security, in general.

So, majorly in future everyone has to be well-versed with cloud and its functioning, whether one works in the tech industry or not.

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INFORMATION SCIENCE AND ENGINEERING \_\_\_\_

# ACHIEVEMENTS



## 24-HOUR RNS HACK OVERFLOW HACKATHON



DATE: 27/05/2023 **TIME: 11:00 AM WE ARE DELIGHTED TO** ANNOUNCE THAT HRISHIKESH **PUROHIT (1NH20IS123) AND RAYID (1NH20IS129), STUDENTS FROM OUR 6TH** SEMESTER ISE PROGRAM, **EMERGED VICTORIOUS IN THE WEB3 DOMAIN OF 24-HOUR RNS HACK OVERFLOW HACKATHON. THIS ESTEEMED EVENT, HELD BY RNSIT ON THE 27TH OF MAY, ATTRACTED OVER 500 PARTICIPANTS. AS** THE WINNING TEAM, THEY **WERE AWARDED A CASH PRIZE** OF 5000RS AND RECEIVED AN OFFER FOR A 6-MONTH **INTERNSHIP AT MSM** AIWORLD.





### **EDITORIALTEAM**





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