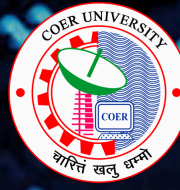


JANUARY - MARCH 2024  
VOLUME I



# NEWSLETTER

## Department of Cyber Security



#### Charting a Course Towards Excellence: Celebrating Achievements and Embracing Innovation in Our Latest Newsletter Edition



It is with great honor that we present to you the latest edition of our departmental newsletter, a vibrant showcase of the diverse array of activities and initiatives embraced by the Department of Cyber Security. Within this edition, you will discover a rich tapestry of endeavors that reflect our steadfast commitment to excellence, innovation and collaborative spirit as we navigate the ever-evolving landscape of academia and industry.

Each message and event highlighted in this newsletter serves as a testament to our collective dedication to advancing knowledge, nurturing talent, and fostering growth within our academic community. From transformative workshops to insightful messages from key leadership figures, this edition encapsulates the vibrancy and vitality of our institution.

Among the highlights featured in this edition:

1. Bharat Gyan Samagna: An Educator Conclave: A gathering of educators to exchange ideas and insights, reinforcing our commitment to educational excellence and innovation.
2. Empowering Tomorrow's Cyber Security Professionals: Workshop on Ethical Hacking and Cyber Crime Investigation: Providing invaluable insights and hands-on experience to empower the next generation of cyber security professionals.
3. Empowering Non-Teaching Staff: Program on Emerging Technologies: Equipping our non-teaching staff with the tools needed to thrive in the digital age through a program on emerging technologies.
4. COER University Commemorates 75th Republic Day with Distinguished Guests: Reflecting on the values of democracy, diversity and unity as we celebrate the 75th Republic Day, renewing our commitment to a brighter future for all.
5. Computing Fest: A celebration of innovation and creativity in the field of computing, showcasing the talent and expertise of our students and faculty.


6. GATE Classes: Elevating engineering education to new heights, providing students with the resources and support needed to excel in their studies.

And much more, including insightful messages from key leadership figures, transformative workshops and noteworthy achievements of our students and faculty.

In conclusion, I extend my congratulations to all our students, faculty and staff for their remarkable contributions to our academic community.

Let us continue to strive for excellence, innovation and collaboration as we chart a course towards a brighter future for generations to come.

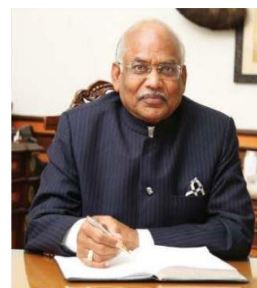
Warm regards,



(Dr. Rohit Kanauzia)

**HOD, Department of Cyber Security,  
College of Smart Computing, COER University**

#### Ensuring Your Digital Future: Message from the President, COER University



It gives me immense pleasure to extend my warmest greetings to all of you through the Cyber Security Department's quarterly newsletter. As we navigate through the dynamic landscape of the digital world, the importance of cyber security has never been more pronounced.

In today's interconnected environment, where technology permeates every aspect of our lives, safeguarding our digital assets and privacy is paramount. The Cyber Security Department at COER University plays a pivotal role in addressing these challenges by equipping students, faculty and professionals with the knowledge and skills necessary to protect against cyber threats.

I praise the dedication and hard work of our faculty members, researchers and students who relentlessly pursue excellence in the field of cyber security. Your contributions are instrumental in shaping a safer digital ecosystem for us all.

In this edition of the newsletter, I encourage you to explore the latest developments, research findings and insights shared by our contributors. Let us use this platform to

exchange ideas, foster collaboration and stay updated on emerging trends and best practices.

As we continue our journey towards a secure digital future, let us remain vigilant, proactive and committed to upholding the highest standards of cyber security.

Thank you for your continued support and participation.



(J.C Jain)

**President, COER University**

#### **Empowering Cyber Guardians for a Safer Digital Future: Message from Vice-President**



In the ever-evolving landscape of technology, the importance of cyber security education cannot be overstated. With each passing day, our dependence on digital systems and networks grows, making us increasingly vulnerable to cyber threats. It is in this context that I wish to underscore the critical role of cyber security education and highlight COER University's commitment to bridging the cyber security education gap.

In today's scenario, where cyber-attacks have become more sophisticated and prevalent, the need for skilled cyber security professionals has never been more urgent. Cyber security education not only equips individuals with the knowledge and skills to protect against cyber threats but also empowers them to contribute to the resilience of our digital infrastructure.

At COER University, we recognize the significance of cyber security education in preparing the next generation of cyber guardians. Through our dedicated Cyber Security Department, we offer comprehensive educational programs that blend theoretical knowledge with practical skills, ensuring that our students are well-equipped to face the challenges of the digital age.

Our faculty members, who are leading experts in the field, impart cutting-edge knowledge and mentorship, guiding students towards excellence in cyber security. Additionally, our state-of-the-art facilities and industry partnerships provide students with hands-on experience and real-world exposure, further enhancing their learning outcomes.

COER University takes pride in its role as a catalyst for innovation and progress in cyber security education. We are committed to continuously evolving our curriculum, embracing emerging technologies and fostering a culture of research and innovation to stay ahead of the curve.

As you peruse through the latest edition of the Cyber Security Department's quarterly newsletter, I urge you to reflect on the importance of cyber security education in today's scenario and the pivotal role that COER University plays in bridging the cyber security education gap.

Let us continue to collaborate, learn and innovate as we work together to build a safer and more secure digital future.



(Shriyance Jain)

**Vice-President, COER University**

#### **Pioneering Excellence, Innovation and Collaboration in Cyber Security Education: Message from Executive Director**



As we commence another dynamic quarter of growth and knowledge acquisition in the cyber security domain, I'm reaching out to shed light on pivotal components.

In today's interconnected world, the importance of cyber security cannot be overstated. Every day, new challenges and threats emerge, underscoring the critical need for highly skilled professionals who can safeguard our digital infrastructure and protect sensitive information.

At COER University, we recognize the pivotal role that education plays in addressing these challenges. Our mission is to empower individuals with the knowledge, skills and ethical framework necessary to excel in the ever-evolving landscape of cyber security.

Our approach is rooted in three core principles:

1. Excellence: We strive for academic excellence in all aspects of our programs, ensuring that our students receive a rigorous and comprehensive education that prepares them for success in the field.

2. Innovation: We embrace innovation and encourage our students to think creatively and critically about cyber security challenges, equipping them with the agility and adaptability needed to thrive in a rapidly changing environment.
3. Collaboration: We believe in the power of collaboration and actively seek partnerships with industry leaders, government agencies and other educational institutions to create a vibrant ecosystem of learning and research.

As we move forward into this quarter, I encourage each of you to embrace the opportunities for growth and learning that lie ahead. Whether you are a student, faculty member or industry professional, your contributions are integral to the success of our cyber security community.

Together, let us continue to push the boundaries of knowledge, innovation and excellence in cyber security education.

Thank you for your dedication and commitment to this important field.



(Charu Jain)

**Executive Director, COER University**

#### **Navigating Academic Challenges for Personal Development and Growth by the Vice Chancellor of COER University**



**Dear students,**

I have been a teacher for the last 25 years. In these years, I have had the opportunity to interact with brightest of students (including teaching IIT JEE top rankers) as well as those who do not do well at all. Having gained experience of two contrasting categories, I can say that academic excellence is influenced by more than just student's IQ level. It is more of his focus, discipline, and lifestyle.

Based on my interactions with students in the past years, let me list the obstacles that students have faced in their academics:

(a) Ineffective study habits: These habits encompass various practices that hinder effective learning and academic progress. Some of these habits include:

**Studying in bed:** Engaging in study sessions while lying in bed can lead to reduced focus and productivity, as the body associates the bed with relaxation and sleep rather than active learning.

**Studying with less concentration:** Attempting to study while lacking concentration can result in limited absorption of information, leading to decreased comprehension and retention of study material.

**Improper way to grasp materials:** Using ineffective strategies to understand and grasp study materials can impede the learning process. It is important to employ suitable techniques such as active reading, note-taking, and summarization to enhance comprehension.

**Studying late at night:** Late-night study sessions, although common, can be counterproductive. Fatigue and drowsiness tend to affect cognitive abilities, making it more challenging to concentrate and retain information effectively.

It is crucial for students to recognize these ineffective study habits and work towards replacing them with more productive and efficient approaches to optimize their learning outcomes.

(b) Distractions and time wasters: Distractions and time-wasters encompass various elements that divert our attention and consume valuable time. Some common examples include:

**Gossiping:** Engaging in idle chit-chat and gossip can consume significant amounts of time, often leading to a loss of focus on important tasks and academic responsibilities.

**Addiction to the internet and messaging apps:** Excessive reliance on the internet, social media platforms, and messaging apps like WhatsApp can be highly distracting, constantly pulling our attention away from studies and hindering productivity.

**Video games:** Immersive and captivating, video games can be a major source of distraction, especially when they are played excessively and interfere with academic commitments.

**Movies and entertainment:** Spending excessive time on movies, TV shows, or other forms of entertainment can lead to procrastination and a lack of proper time management for studying and other academic pursuits.

It is important for students to recognize these distractions and consciously minimize their impact in order to prioritize their academic progress and achieve their goals effectively.

(c) Poor time management: Poor time management is a common challenge that many students face in their academic journey. It is crucial for students to recognize the importance of effective time management and its impact on their overall productivity and success.

One of the key aspects of poor time management is the failure to create a schedule or plan before going to sleep. Without a clear plan for the day ahead, students may find themselves aimlessly navigating through tasks, leading to wasted time and a lack of direction. By taking the time to create a schedule the night before, students can outline their goals and prioritize their activities, ensuring a more organized and productive day.

Another aspect of poor time management is the inability to effectively balance time between activities. Students often find themselves overwhelmed with multiple commitments, including academic tasks, extracurricular activities, social engagements, and personal responsibilities. Without proper time allocation, it becomes challenging to give each aspect of their lives the attention it deserves.

(d) Lack of motivation: Lack of motivation can pose a significant challenge for students, making it difficult to maintain determination and sustain effort over time.

It is common to experience moments when motivation wanes, leading to decreased productivity and engagement in academic pursuits. When students find themselves lacking motivation, they may struggle to stay focused, complete assignments, or maintain a consistent study routine.

(e) Lack of confidence: Lack of confidence can significantly impact students' academic performance, especially when past failures have diminished their self-assurance. It is common for setbacks and disappointments to erode confidence levels, making it challenging to approach new tasks and challenges with a positive mindset.

(f) Lack of problem solving approach: The lack of a problem-solving approach can hinder students' ability to tackle academic challenges effectively. When students struggle with this, it often manifests in difficulties understanding questions properly and determining the appropriate approach to take

(g) Exam fear and anxiety: Exam fear and anxiety can have a profound impact on students' performance, creating significant barriers to their ability to demonstrate their knowledge accurately. The presence of fear, stress, and self-doubt can manifest in various ways, ultimately hindering their academic success.

When students experience exam fear, it often stems from the pressure to perform well and meet expectations. The fear of failure, the anticipation of challenging questions, and the potential consequences of poor performance can trigger a heightened sense of anxiety. This emotional state can interfere with cognitive processes, making it difficult for students to showcase their true abilities during exams.

The stress associated with exams can also be overwhelming. The sheer volume of material to study, the limited time available, and the weight of expectations can create a sense of pressure and unease. This stress can lead to physical and

mental fatigue, affecting concentration, memory recall, and overall cognitive functioning. As a result, students may struggle to access and express their knowledge effectively when faced with exam-related stress.

Moreover, self-doubt can undermine students' confidence and belief in their own abilities. Negative thoughts and feelings of inadequacy can arise, eroding their self-esteem and diminishing their performance potential. Self-doubt can lead to second-guessing answers, excessive worrying, and a lack of clarity, ultimately impeding students' ability to demonstrate their knowledge accurately.

Exam fear and anxiety can create a vicious cycle. The fear and anxiety experienced before an exam can impact performance during the exam, which in turn may reinforce the fear and anxiety in future exams. Breaking this cycle is crucial for students to unlock their full potential and perform at their best.

Working on them:

Do you identify with one or some of them? Will you like to work with me and your teachers in removing them and becoming a positive contributor to society? Recognition of shortcomings or defects is a significant step towards rectification and personal growth. By recognizing our shortcomings, we open the door to improvement and positive change. It allows us to reflect on our actions, attitudes, and behaviors, and take proactive measures to rectify them. When we acknowledge our weaknesses, we become more open to feedback and constructive criticism, leading to personal development and the refinement of our skills.

As educators, we are here to guide and support you in overcoming these obstacles. We encourage you to identify with these challenges and embark on a journey of self-improvement. Together, let's work towards removing these obstacles, fostering a positive learning environment, and becoming positive contributors to society.

Your teachers and I are committed to helping you achieve your academic goals and unlock your full potential as well as to provide you character based education. Let us embark on this transformative journey together, where we learn, grow, and contribute as a community. With dedication, determination, and support, we can overcome these obstacles and pave the way for a successful and fulfilling academic future serving the society.

Wishing you all the best,



Ankush Mittal, Ph.D. (NUS, Singapore)  
**Vice Chancellor, COER University**

#### A Visionary Message from Dr. B.M Singh, Pro-Vice Chancellor of COER University



I am pleased to address you through the Cyber Security Department's quarterly newsletter, shedding light on the myriad benefits of cyber security education.

In today's interconnected world, where technology permeates every aspect of our lives, the need for robust cyber security measures has never been more pressing. Cyber threats continue to evolve in sophistication and frequency, posing significant risks to individuals, organizations and nations alike. It is against this backdrop that cyber security education emerges as a powerful tool in our arsenal, equipping individuals with the knowledge and skills to protect against cyber threats and safeguard our digital assets and privacy.

COER University is committed to the advancement of cyber security education, recognizing its transformative potential in shaping a safer and more secure digital future. Through our comprehensive educational programs, we aim to empower our students with the following benefits: Enhanced Awareness, Technical Proficiency, Critical Thinking and Problem-Solving, Ethical and Responsible Behavior and Career Opportunities. As you navigate through the pages of this newsletter, I encourage you to reflect on the myriad benefits of cyber security education and the profound impact it can have on individuals, organizations and society as a whole.

Let us continue to harness the power of education to build a safer, more resilient digital ecosystem for generations to come.

Warm regards,



(Dr. B.M Singh)

**Pro-Vice Chancellor, COER University**

#### Director's Message: Advancing Cyber security Education and Research at COER University



As we continue our journey towards excellence in the field of Cyber Security, I am delighted to share some updates and insights from Uttarakhand Science Education and Research Centre (USERC).

Cyber Security has emerged as one of the most pressing challenges of our time, with threats becoming increasingly sophisticated and pervasive. In response to this evolving landscape, USERC remains committed to advancing Cyber Security education, research and practice in collaboration with COER University. Our collaboration with COER University has been instrumental in fostering a culture of innovation and excellence. Through joint research projects, academic programs and industry collaborations, we have been able to equip students with the knowledge, skills and resources necessary to tackle emerging cyber threats effectively. Furthermore, our collaborative efforts have enabled us to stay at the forefront of research and development, leveraging cutting-edge technologies and interdisciplinary approaches to address complex challenges. By combining our expertise and resources, we are not only enhancing the academic experiences of our students but also making meaningful contributions to the advancement of knowledge and practice. As we look ahead, I am confident that our collaboration will continue to thrive, driving innovation and making a positive impact on society. Together, we have the opportunity to shape the future of education and research, empowering individuals and organizations to navigate the digital landscape securely.

I would like to express my sincere gratitude to the faculty, staff and students of the Department of Cyber Security, COER University for their dedication, passion and commitment to excellence. Your contributions are invaluable and I am excited about the possibilities that lie ahead as we work together to address the challenges of tomorrow.

Best regards,



(Prof. (Dr.) Anita Rawat)

**Director, USERC, Govt. of Uttarakhand**

#### EXPLORING EXCELLENCE: ENGAGING ACTIVITIES, WORKSHOPS AND SEMINARS

##### 1. Empowering Tomorrow's Cyber Security Professionals: Workshop on Ethical Hacking and Cyber Crime Investigation

The Department of Cyber Security, COER University successfully organized a comprehensive Three-Day Workshop on Ethical Hacking and Cyber Crime Investigation from January 4th to 6th, 2024. This workshop aimed to equip participants with a deep understanding of ethical hacking techniques, cybercrime investigation methodologies and practical skills crucial in the field of cyber security.



Day 1 began with an exploration of the TOR browser and the Deep and Dark Web, providing insights into hidden online ecosystems. Participants learned about cryptocurrency transactions and virtual credit card mechanisms, gaining valuable insights into the digital financial landscape. The session on email spoofing and investigation equipped attendees with investigative techniques to combat deceptive practices.

On Day 2, participants gained proficiency in utilizing open-source intelligence tools and applied their knowledge to real-life cybercrime investigation scenarios. Insights from actual case studies provided a practical understanding of cybercrime investigation within law enforcement systems. Strategies and best practices for preventing cyber-attacks were discussed, empowering participants with proactive measures.

Day 3 introduced participants to Bugcrowd, a platform for ethical hacking and vulnerability disclosure programs.

Different levels of vulnerabilities and the reporting process were covered, emphasizing responsible disclosure. Techniques related to OTP and payment bypass were addressed, along with live testing on Bugcrowd, enabling participants to apply their skills in a practical environment.

The workshop concluded with insights into career paths, certifications and the expansive scope within the field of cyber security. Attendees were briefed on the cyber complaint portal and received certificates recognizing their successful completion of the workshop.

The Three-Day Workshop on Ethical Hacking and Cyber Crime Investigation contributed to the professional growth of participants in the field of cyber security. This workshop was been a fulfilling journey of exploration and learning.

##### 2. Empowering Non-Teaching Staff: Program on Emerging Technologies

The Department of Cyber Security, organized a transformative Two Days Staff Development Program on Emerging Technologies on January 8th and 9th, 2024. The aim of this program was to enhance the skillset of non-teaching staff members by providing them with a foundational understanding of key emerging technologies, thereby enabling them to adapt to the evolving technological landscape.

The Staff Development Program covered a diverse range of emerging technologies, offering participants a comprehensive understanding of their applications and implications in various domains. The program facilitated interactive sessions and workshops conducted by faculty members from the Department of Cyber Security, ensuring a rich learning experience for all participants.

- Artificial Intelligence by Ms. Soumya Upadhay, Assistant Professor:

Ms. Soumya Upadhay delved into the intricacies of Artificial Intelligence, providing participants with insights into its applications, challenges and future prospects. The session equipped participants with a deeper understanding of this transformative technology.

- Cyber Security by Dr. Rohit Kanauzia, Head of Department:

Dr. Rohit Kanauzia, the Head of the Department of Cyber Security, delivered a comprehensive session on Cyber Security. He addressed the latest threats, preventive measures and highlighted the crucial role played by non-teaching staff in maintaining a secure university environment.

- Data Science by Ms. Akshima Agarwal, Assistant Professor:

Ms. Akshima Agarwal explored the field of Data Science, discussing its relevance, methodologies and impact on decision-making processes within the University. Participants gained insights into harnessing data for informed decision-making.

- Java by Mr. Varun Mishra, Assistant Professor:

Mr. Varun Mishra conducted a session on Java, providing participants with a foundational understanding of this programming language and its applications in various technological domains. The session aimed to enhance participants' programming skills.

The non-teaching staff actively engaged in the sessions and their feedback was overwhelmingly positive. Participants expressed gratitude for the informative and relevant content, as well as the opportunity to enhance their understanding of emerging technologies.

The program has fostered a culture of continuous learning within COER University, ensuring that staff members are equipped to navigate the evolving technological landscape effectively.

### 3. COER University Commemorates 75th Republic Day with Distinguished Guests

On the memorable occasion of the 75th Republic Day, COER University resonated with patriotic fervor as the campus came together to honor the nation's heritage and values. The ceremony, held on January 26, 2024, was graced by the presence of the Hon'ble President of the University, Shri. J.C Jain, who presided over the event and unfurled the national flag.



Accompanying the President were distinguished guests

including the Vice- President, Shri Shriyance Jain, Pro-Vice Chancellor, Dr. B.M Singh and Registrar, Dr. Manish Mathur. The Head of the Cyber Security Department, Dr. Rohit Kanauzia, also participated in the ceremony, alongside all faculties from various departments.

The gathering was a poignant reminder of the values of unity, diversity and democracy that define the fabric of our nation. As the tricolor fluttered majestically in the breeze, hearts swelled with pride and voices resonated with the national anthem.

COER University's commemoration of the 75th Republic Day was a testament to its unwavering dedication to fostering a culture of patriotism, integrity and excellence. It was a momentous occasion that united the campus community in a spirit of solidarity and hope for a brighter future for our beloved nation.

### 4. Insightful Industrial Visit to ONGC, Dehradun: Bridging Academia with Industry

On 9<sup>th</sup> February 2024, the Department of Cyber Security orchestrated a captivating industrial visit to ONGC, Dehradun, aiming to provide students with a firsthand understanding of the corporate landscape. With active participation from 46 students and 02 faculty members, the visit proved to be an enriching experience for all involved.



The itinerary commenced with a guided tour of ONGC's workspace, offering attendees a glimpse into its operational infrastructure. A brief introduction to the company's operations set the stage for deeper exploration.

Mr. Vinod K.B, an expert in the field, provided a detailed overview of ONGC's profile, elucidating its significance in the



energy sector and beyond. This session equipped participants with valuable insights into the company's mission, vision and strategic objectives.

Divided into two groups, students embarked on a captivating journey through the Subir Raha Oil Museum. Led by knowledgeable guides, namely Mr. Vishanath and Mr. S.S Mishra, attendees gained invaluable insights into ONGC's multifaceted operations. From understanding the intricacies of different departments to exploring the company's global footprint, students were immersed in a world of practical learning.

Further enhancing the learning experience, students enjoyed meaningful interactions with officials accompanying them at the museum. These engagements provided unique insights into real-world challenges and opportunities, enriching participants' perspectives on corporate practices.

The seamless coordination of the visit was spearheaded by Ms. Renu Bahuguna and Mr. Rohit Kumar, Assistant Professors in the department, whose dedication ensured a memorable and impactful experience for all.

The industrial visit to ONGC, Dehradun served as a bridge between academia and industry, empowering students with practical insights and paving the way for their future success in the corporate world.

#### 5. Bharat Gyan Samagan 2024: A Catalyst for Educational Transformation

On February 10th, 2024, COER University hosted the Bharat Gyan Samagan 2024, also known as the Educator Conclave, bringing together luminaries, scholars and practitioners from the education sector across the nation. With the objective of facilitating knowledge sharing, showcasing innovative pedagogical approaches, addressing challenges and fostering partnerships, the event served as a dynamic platform for collaboration and exchange of ideas.

The opening session commenced with an inspiring inaugural address by Mr. J.C Jain, President, COER University, setting the tone for the day's discussions. We were honored to have Lieutenant General Gurmeet Singh (Retd.), the Hon'ble Governor of Uttarakhand, as the Chief Guest, along with Guests of Honor's: Prof. Jagmohan Singh Rana, Former Chairman of the Uttarakhand Public Service Commission and Mr. Shiv Khara, a distinguished motivational speaker. Their presence added immense value to the conclave, reflecting the shared commitment towards advancing education.

With 52 Vice-Chancellors from various universities and 400 School Principals in attendance, the conclave featured stimulating panel discussions on pertinent topics such as curriculum enhancement, technology assimilation, inclusive education and comprehensive student growth. The panelists, comprised of experts in their respective fields, shared

valuable insights, igniting substantive conversations and offering actionable strategies to address key challenges facing the education sector.



Following the enlightening discussions, attendees were treated to an enjoyable Dinner with Cultural Night at the University Lawn, providing an opportunity for further networking and camaraderie among educators and stakeholders.

One of the highlights of Bharat Gyan Samagan 2024 was the project exhibition, where students showcased their innovative projects, research findings and practical applications. The exhibition not only demonstrated the students' dedication and ingenuity but also served as a platform for collaboration, inspiration and continuous improvement within the academic community.



During the closing session, Shri. Shriyance Jain, Vice-President, COER University, expressed heartfelt gratitude to

all participants, sponsors and partners for their invaluable contributions to the success of the event. He emphasized the significance of sustained collaboration and collective action in navigating the challenges confronting the education sector, underscoring the importance of driving positive change through mtive efforts.

Bharat Gyan Samagan 2024 was more than just a conference; it was a testament to the collective commitment towards educational excellence and innovation. As we reflect on the insights gained and collaborations formed, we look forward to leveraging these learning to shape the future of education and drive meaningful impact in the years to come.

#### 6. Exploring Open Source: Insights from GSOC Seminar

On the 20<sup>th</sup> February 2024, the department hosted an insightful seminar titled "Getting Started with Open Source: A small guide through GSOC" at Seminar Hall, Computing Block. The seminar, led by Aum Vats and Saiyam Tuteja, both 2nd-year students, attracted a remarkable turnout with 157 enthusiastic participants in attendance.

Attendees were treated to a comprehensive exploration of the world of open source, guided by the expertise and experiences of their peers. Aum and Saiyam adeptly navigated through the nuances of Open Source initiatives, offering valuable insights and practical tips on how to embark on projects, particularly focusing on the prestigious Google Summer of Code (GSOC) program.



Through engaging presentations and interactive discussions, participants gained a deeper understanding of the significance of Open Source contributions and the

opportunities available through platforms like GSOC. The seminar not only served as a guide for novices but also inspired seasoned developers to explore new avenues for collaboration and innovation.

Overall, the seminar proved to be an enriching experience for all involved, showcasing the department's commitment to fostering a culture of knowledge sharing and skill development. It reinforced the importance of leveraging Open Source as a catalyst for learning, growth and community building within the realm of computing.

#### 7. Workshop on Cyber Security & Ethical Hacking at IIT Roorkee

On February 21, 2024, students of Department of Cyber Security had the invaluable opportunity to participate in a workshop titled "Cyber Security & Ethical Hacking," organized by the Institution of Engineers (India) at IIT Roorkee. This event served as a platform for students to immerse themselves in the intricacies of cyber security and ethical hacking, gaining firsthand exposure to cutting-edge practices and methodologies in the field. The visit was made possible through the diligent coordination efforts of Ms. Renu Bahuguna and Ms. Anshoo Bhatia, who ensured that the students could make the most of this enriching experience.



Throughout the workshop, participants engaged in a series of interactive sessions, hands-on exercises and insightful discussions led by industry experts and seasoned professionals. They were introduced to the latest tools, techniques and best practices in cyber security, equipping them with practical skills and knowledge essential for navigating the ever-evolving landscape of digital threats and vulnerabilities. Moreover, the workshop provided a conducive environment for networking and collaboration, allowing our students to connect with peers and professionals from across the industry. Overall, this

workshop not only broadened the horizons of the students but also reinforced the department's commitment to fostering excellence in cyber security education and preparing future professionals to meet the challenges of the digital age with confidence and proficiency.

#### 8. Empowering Students: Session with Alumnus Mr. Saurabh Bansal

On the 24<sup>th</sup> February 2024, the College of Smart Computing organized an enriching session with Mr. Saurabh Bansal at the Computing Block. Mr. Bansal, an alumnus of the University, completed his B.Tech from COER in 2011, followed by an M.Tech in 2022. Currently pursuing his Ph.D. at COER, he has garnered extensive industry experience, having served at Microsoft from 2015 to 2023 and now holds the position of Director of Engineering at Adobe.

The session, attended by students from the department, was designed to address various aspects of skill development and career advancement. Mr. Bansal shared invaluable insights tailored to students facing challenges in coding, studying, learning and applying their knowledge. He emphasized the importance of self-reflection and provided practical strategies to overcome obstacles and excel in their academic pursuits.



Additionally, the session aimed to inspire students to aspire for lucrative career opportunities in leading product companies, with packages exceeding 8 LPA. Mr. Bansal's guidance encouraged students to approach their goals with discipline and determination, equipping them to strive for greater milestones in their professional journey.

Overall, the session with Mr. Saurabh Bansal served as a catalyst for personal and professional growth, empowering students to harness their potential and pursue success with confidence.

#### 9. Nurturing Academic Excellence: A Snapshot of Dedication and Engagement during MTE-I

The First Mid-Term Examination for the Even Semester of the academic year 2023-24 took place from 26<sup>th</sup> to 29<sup>th</sup> February 2024. This examination served as a pivotal assessment point for students, allowing them to gauge their understanding of the course material and their progress in their respective fields of study. The active participation of students throughout the examination period was notable and contributed to the overall success of the evaluation process.

Spanning four days, the First Mid-Term Examination covered a wide range of subjects and topics pertinent to the curriculum of the Even Semester. Faculty members meticulously designed examination papers tailored to each course's learning objectives and content coverage.



Students demonstrated a commendable level of engagement and preparedness throughout the examination period. They actively reviewed course materials, sought clarification on concepts and engaged in group study sessions to reinforce their understanding of key topics.

Faculty members and examination administrators ensured the smooth conduct of examinations, adhering to established protocols and regulations.

#### 10. Empowering Tomorrow's Leaders: Workshop on Digital Transformation"

The College of Smart Computing recently hosted a two-day immersive learning workshop on Digital Transformation on 1<sup>st</sup> and 2<sup>nd</sup> March 2024, at the Vardhman Auditorium. Under the theme "Learn, Adapt and Succeed," the workshop aimed to equip attendees with the knowledge and skills necessary to navigate the evolving landscape of technology and business.

Mr. Gaurav Sharma, a distinguished Digital Transformation Expert and an alumnus of IIM Bangalore, graced the event as the keynote speaker. His wealth of experience and insights provided invaluable guidance to participants on leveraging digital technologies to drive organizational growth and innovation.

Students from the department actively engaged in the workshop, seizing the opportunity to enhance their understanding of digital transformation strategies and best practices. Through interactive sessions and practical case studies, they gained practical insights into real-world applications and challenges in the digital realm.



The workshop fostered a dynamic learning environment where attendees were encouraged to think critically, adapt to changing trends and position themselves for success in the digital age.

The workshop on Digital Transformation was a resounding success, leaving participants inspired and empowered to embrace the transformative power of digital technologies in their personal and professional lives.

#### 11. Exploring Machine Vision: Special Session with Prof. Pavel Skrabanek

From 3<sup>rd</sup> to 16<sup>th</sup> March 2024, the College of Smart Computing embarked on an enlightening journey into the realm of "Machine Vision" through a special session. The session featured Prof. Pavel Skrabanek from Brno University of Technology, Czech Republic, Central Europe, as the resource person.

Faculties and students alike eagerly participated in the session, engaging in fruitful discussions and exploring the intricacies of Machine Vision. Prof. Skrabanek's expertise and insights provided a comprehensive understanding of the subject, enriching the learning experience for all involved.



One of the highlights of the session was the project discussion on Machine Vision, where faculties and students collaborated to delve deeper into practical applications and innovative solutions. This hands-on approach fostered creativity and critical thinking, laying the groundwork for future endeavors in the field.

Overall, the special session on Machine Vision was a testament to the College of Smart Computing's commitment to fostering excellence in education and research.

It provided a platform for knowledge exchange and collaboration, empowering participants to stay at the forefront of technological advancements in the ever-evolving landscape of computing.

#### 12. Computing Fest by IITians

From 12<sup>th</sup> to 16<sup>th</sup> March 2024, the College of Smart Computing, COER University, in collaboration with Explorin

Academy, hosted the highly anticipated Computing Fest. This five-day event, designed by IITians, aimed to provide first-year B.Tech. students with an immersive experience in the world of technology.



The fest commenced with an enlightening session by esteemed dignitaries, including Shri. J.C Jain, Hon'ble President, Dr. Ankush Mittal, Vice-Chancellor, Dr. B.M Singh, Pro-Vice Chancellor and Heads of the College of Smart Computing.

The fest began with Logic Day, where participants engaged in activities and workshops aimed at enhancing their logical thinking skills. Through interactive sessions led by industry experts, students were introduced to the fundamental principles of logic and problem-solving, laying a strong foundation for the days ahead.

Coding Day immersed participants in the world of programming and software development. Workshops, coding competitions and coding challenges provided students with hands-on experience in various programming languages and frameworks. The day was filled with excitement as students tackled coding problems and honed their programming skills under the guidance of experienced mentors.

Robotics Day brought the fascinating world of robotics to life. Participants delved into the mechanics, electronics and programming aspects of robotics through workshops and hands-on activities. From building and programming robots to participating in robotics competitions, students experienced firsthand the interdisciplinary nature of robotics and its applications in real-world scenarios.

Drone Day soared to new heights as participants explored the burgeoning field of drones and aerial technology. Workshops on drone assembly, flight dynamics and aerial photography captivated students' interests. Live drone demonstrations and flight challenges provided an adrenaline-

filled experience, showcasing the versatility and potential of drone technology.

Content Day served as a platform for participants to showcase their creativity and technical prowess. The day celebrated the intersection of technology and creativity, emphasizing the importance of compelling content in today's digital age.



Throughout the fest, Night Labs provided participants with extended opportunities for hands-on learning and experimentation. These late-night sessions allowed students to delve deeper into various technical domains, collaborate on projects and engage in innovative problem-solving under the guidance of mentors and facilitators.

Computing Fest 2024 was a resounding success, attracting over 520 enthusiastic participants eager to explore the vast realm of technology. Through a well-curated lineup of events and activities spanning logic, coding, robotics, drones and content creation, students gained invaluable insights, skills and experiences that will shape their academic and professional journey.

The collaboration between COER University and Explorin Academy, coupled with the dedication of faculty members, ensured that the fest provided a truly immersive and enriching experience for all participants.

### 13. IIT Roorkee Seminar: Inaugurating India's First Semiconductor Facilities

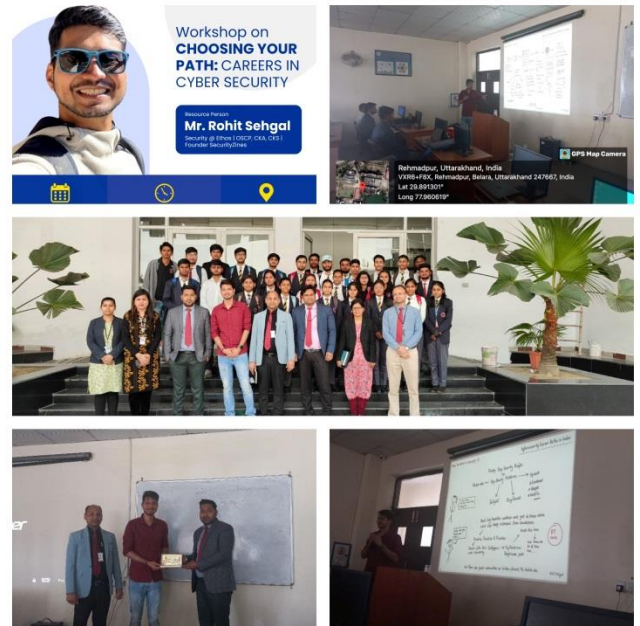
On March 13, 2024, IIT Roorkee hosted a landmark seminar titled "India's Techade - Chips for Viksit Bharat," which marked the inauguration of India's First Semiconductor Fabrication Facilities. The event garnered immense significance as it welcomed Hon'ble Prime Minister Shri Narendra Modi, who addressed the seminar virtually. His presence underscored the importance of semiconductor industries in fostering Viksit Bharat, emphasizing the nation's technological advancement and self-reliance goals. Prime Minister Modi's insights provided invaluable guidance to the faculty members and students in attendance, inspiring them to contribute to India's semiconductor ecosystem. Additionally, the seminar featured a dynamic panel discussion led by esteemed experts, which delved into the vast opportunities and challenges in semiconductor manufacturing within India. Furthermore, as part of the seminar, second-year students had the opportunity to visit IIT Labs, where instructors provided them with insights into TIDES IIT Roorkee: Fostering Innovation and Entrepreneurship. During their visit, students engaged with peers already involved with TIDES IIT Roorkee, gaining firsthand knowledge and inspiration to explore innovation and entrepreneurship initiatives themselves.



Overall, the seminar and accompanying activities provided a rich learning experience, igniting enthusiasm and ambition among students to contribute to India's technological advancement.

### 14. Workshop on Choosing Your Path - Careers in Cyber Security

To provide participants with a thorough comprehension of career opportunities within the realm of cyber security, the Department of Cyber Security, orchestrated a one-day workshop entitled "Choosing Your Path: Careers in Cyber Security" on March 16th, 2024. The aim of this workshop was to empower students to explore and pinpoint their optimal career trajectory amidst the dynamic and rapidly evolving domain of cyber security. The resource person for the event was Mr. Rohit Sehgal, Security @ Ethos | OSCP, CKA, CKS | Founder SecurityZines.



The workshop commenced with a cordial welcome from the Department of Cyber Security, underscoring the significance of cyber security in today's digital landscape. Participants were then acquainted with the day's agenda, comprising a sequence of interactive sessions and discussions. Throughout the workshop, participants delved into various aspects of cyber security, encompassing network security, ethical hacking, digital forensics, risk management and compliance. Seasoned subject matter experts and industry professionals shared their insights and proffered valuable guidance on navigating the cyber security landscape. Moreover, the workshop incorporated practical exercises and case studies tailored to aid participants in recognizing their strengths and interests within the field of cyber security. Interactive dialogues encouraged participants to contemplate their career objectives and aspirations, thereby facilitating the formulation of personalized career trajectories.

#### 15. Unlocking Opportunities: through Industrial Visit

With the primary goal of providing students with practical knowledge and exposure necessary for exploring and comprehending various aspects of the industry, the Department of Cyber Security organized a successful one-day Industrial Visit at the Information Technology Development Agency (ITDA) on 16<sup>th</sup> March 2024. This visit was meticulously crafted to offer participants a comprehensive immersion into the realms of cyber security and IT.

Throughout the visit, students were afforded the opportunity to delve into diverse facets of cyber security and information technology. They actively engaged in interactive sessions, demonstrations and discussions facilitated by industry experts. Topics covered during these sessions ranged from career prospects in IT to educational pathways and certifications essential for specialization.



The Industrial Visit functioned as a valuable guide for students contemplating careers in burgeoning industries such as drones and 3D printing. By acquiring practical insights and exposure, participants are now better poised to make informed decisions and initiate their journey towards a fulfilling profession in the swiftly evolving IT landscape.

The one-day Industrial Visit proved to be an enriching and enlightening experience, furnishing students with indispensable knowledge and guidance as they chart their courses in cyber security and IT careers.

#### 16. Unlocking Opportunities: Seminar on Higher Studies in Canada

To provide valuable insights and information for students interested in pursuing higher education abroad, particularly

in Canada, the College of Smart Computing, COER University, on 23<sup>rd</sup> March 2024 organized a seminar on the "Scope and Opportunities of Higher Studies in Canada." The seminar featured Ms. Mohua Dutta, CEO of MDS IndoCan, Ottawa, Canada, as the keynote speaker.

The session aimed to highlight Canada's high-quality education system, the thriving job market, practical skills development, global perspective and the diverse range of programs available in Canadian universities. Overall, the objective was to inform and guide students in making informed decisions about pursuing higher education in Canada. The seminar commenced with Ms. Mohua Dutta, CEO of MDS IndoCan, Ottawa, Canada, discussing the advantages of studying in Canada. Ms. Dutta emphasized Canada's strong economy and excellent job prospects for graduates. She highlighted the importance of practical skills and a global perspective in today's world, both of which are emphasized in Canadian education.

The session provided a comprehensive overview of the benefits of pursuing higher education in Canada, offering valuable information for students considering studying abroad.



**High-Quality Education:** Canada offers a world-class education system, providing students with strong academic foundations.

**Thriving Job Market:** Graduates in Canada have excellent opportunities for career advancement across various industries due to the country's robust economy.

**Practical Skills Development:** Canadian programs prioritize practical skills alongside theoretical knowledge, preparing students for the workplace.

**Global Perspective:** Studying in Canada fosters a global perspective, which is valuable in today's interconnected environment.

**Diverse Programs:** Canadian universities offer a wide range of programs in STEM fields, Arts & Humanities, Sustainability and Innovation, catering to various interests.

The seminar highlighted the high-quality education system, the thriving job market, practical skills development, global perspective and the diverse range of programs available in Canadian universities.

It was particularly relevant for students interested in studying abroad, offering a compelling case for considering Canada as a destination for academic and professional growth. The presence of Dr. Ankush Mittal, the Hon'ble Vice Chancellor, Dr. B.M Singh, Pro-Vice Chancellor, Dr. Manish Mathur, Registrar, Dr. Mridula, Dean IQAC, Dr. Rohit Kanauzia, Head of the Department of Cyber Security and other deans and heads along with faculties were in attendance.

#### 17. Women's Empowerment: Workshop on Cleanliness and Sanitation

On March 28th, 2024, a one-day workshop was organized for women with the theme "नारी शक्ति स्वच्छता का प्रयास, हम सब मिलकर करेंगे राष्ट्र का विकास" (Women's Power: A Collective Effort for Cleanliness, Sanitation and National Development). The workshop focused on promoting cleanliness, sanitation and water conservation, aligning with the Swachh Bharat Mission under the Department of Ministry of Water Resources, River Development and Ganga Rejuvenation.



Held at NIH Roorkee as part of Swachhta Pakhwada-2024, the event aimed to raise awareness and encourage action towards maintaining cleanliness and conserving water resources. Ms. Renu Bahuguna, an Assistant Professor and Dr. Mridula, Dean of IQAC at COER University, actively participated in the workshop, demonstrating their commitment to these crucial initiatives. The workshop provided a platform for women to discuss and exchange ideas on effective strategies for promoting cleanliness,

sanitation and water conservation in their communities. Through collaborative efforts, the participants pledged to contribute to the nation's development by actively participating in initiatives aimed at creating a cleaner and healthier environment.

The participation of Ms. Renu Bahuguna and Dr. Mridula underscores the University dedication to social responsibility and sustainable development. Their involvement in such initiatives reflects our commitment to empowering women and fostering positive change in society.

#### SERVING SOCIETY: OUTREACH INITIATIVES MAKING A DIFFERENCE

#### Empowering Tomorrow's Technologists: Community Programme on Computer Fundamentals, IoT and Cyber Security

On February 8, 2024, the Department of Cyber Security organized a Community Development Programme at Junior High School Padav Kshetra School, Roorkee. The aim of the programme was to educate and guide students about the "Fundamentals of Computer and Emerging Technologies: IoT and Cyber security." The talk session was conducted by Ms. Anshoo Bhatia and Ms. Renu Bahuguna, experts in the field of cyber security and emerging technologies.



The Community Development Programme commenced with a welcome from the Department of Cyber Security, emphasizing the importance of understanding computers and emerging technologies in today's digital age. The session was attended by students and faculty members of Junior High School Padav Kshetra School.

Ms. Anshoo Bhatia and Ms. Renu Bahuguna, led the talk session. They began by providing an overview of the fundamentals of computers, explaining key concepts such as



hardware, software, operating systems and basic computer operations. The students were engaged through interactive discussions and visual aids, making the complex concepts easily understandable.

Following the discussion on computer fundamentals, the focus shifted to emerging technologies, with a special emphasis on the Internet of Things (IoT). Ms. Bhatia and Ms. Bahuguna explained the concept of IoT and its applications in various domains such as smart homes, healthcare, agriculture and transportation. The students were intrigued by the potential of IoT to revolutionize daily life and enhance efficiency.

The talk session concluded with a discussion on cyber security, highlighting the importance of protecting digital assets and personal information in the digital age. Ms. Bhatia and Ms. Bahuguna shared practical tips and best practices for staying safe online, emphasizing the need for strong passwords, regular software updates and vigilance against cyber threats.

#### **GATE CLASSES: FOSTERING ENGINEERING EXCELLENCE & STUDENT SUCCESS**

##### **1. GATE classes: Elevating Engineering Education by Hon'ble Vice Chancellor**

In a remarkable demonstration of leadership and dedication to student success, Dr. Ankush Mittal, the Hon'ble Vice-Chancellor, has initiated specialized courses aimed at preparing all COER University students for the Graduate Aptitude Test in Engineering (GATE).



Assuming the responsibility personally, the Vice-Chancellor ensures that every student receives comprehensive preparation and guidance for this crucial examination.

These specialized courses offer students a unique opportunity to benefit from Vice-Chancellor extensive experience, expertise and mentorship. Engaging directly with the Vice-Chancellor provides students with invaluable insights, clarity on complex subjects, and strategic advice to enhance their performance in the GATE exam. Additionally, these courses foster an environment conducive to learning, encouraging active participation, collaborative study and academic advancement.

Through rigorous training sessions, students enhance their understanding of core engineering concepts, refine problem-solving skills, and familiarize themselves with the exam's pattern and syllabus. Dr. Mittal's mentorship fosters an atmosphere of academic excellence, empowering students to excel in the GATE examination and pursue advanced studies in engineering.

Through interactive sessions, practice tests and expert guidance, students are equipped with the necessary knowledge and confidence to excel in the GATE examination.

##### **2. Students shine by qualifying in GATE 2024**

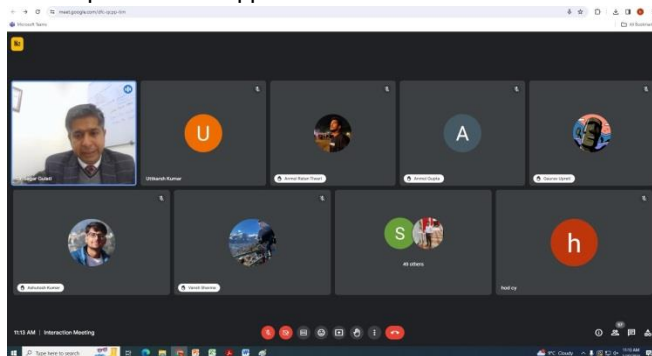


Ashutosh Kumar and Utkarsh Gupta, both final year students of the department, have achieved a commendable feat by successfully qualifying in the GATE 2024 examination. GATE, which stands for Graduate Aptitude Test in Engineering, is a highly competitive and prestigious examination conducted annually for admission into postgraduate programs in engineering and technology across various Indian institutes, as well as for recruitment in public sector undertakings (PSUs). Their success in qualifying the GATE 2024 exam is a testament to their dedication, hard work and academic excellence. This achievement not only highlights their proficiency in their respective fields of study but also opens up numerous opportunities for higher education and career advancement in the field of engineering and technology. Ashutosh Kumar and Utkarsh Gupta's accomplishment brings pride to the department and serves as inspiration for their peers, motivating them to strive for similar academic excellence.

### COLLABORATIVE CONVERSATIONS: MEETINGS AND INTERACTIONS FOR INNOVATION

#### 1. Placement and Career Opportunities Meeting for Final Year Students

The Department of Cyber Security, organized a meeting with final year students on 10<sup>th</sup> January 2024 to discuss placement and career opportunities. Chaired by Dr. Sagar Gulati, the then Director Computing, the meeting aimed to provide students with valuable insights and guidance regarding their future career prospects. Dr. Rohit Kanauzia, Head of the Cyber Security department and other heads of the College of Smart Computing were also present to offer their expertise and support.



The meeting commenced with a warm welcome from Dr. Sagar Gulati, who emphasized the importance of career planning and preparation for final year students. He highlighted the dynamic nature of the industry and the multitude of opportunities available for graduates with the right skills and qualifications.

Dr. Rohit Kanauzia, Head of the Cyber Security department, provided an overview of the current trends and demands in the job market.

The meeting included interactive sessions where students had the opportunity to ask questions and seek advice from the panel of experts.

The meeting on placement and career opportunities for final year students was highly informative and beneficial. Students gained valuable insights into the diverse career paths available and received guidance on how to prepare for the job market.

#### 2. "Kar Har Maidan Fateh" - Mass Interaction on Opportunities and Challenges

On February 6<sup>th</sup>, 2024, the College of Smart Computing organized a significant mass interaction event titled "Kar Har Maidan Fateh" at the Vardhman Auditorium. This event served as a platform for over 500 students from the College of Smart Computing to engage in discussions about the

opportunities and challenges they face. The event was chaired by Dr. Sagar Gulati, then Director of Computing and attended by Dr. Rohit Kanauzia, Head of the Cyber Security department, along with other Head's of the College of Smart Computing.

The event began with an enthusiastic welcome from Dr. Sagar Gulati, setting the tone for the interaction's title, "Kar Har Maidan Fateh," which translates to "Conquer Every Battlefield." Dr. Gulati emphasized the importance of facing challenges head-on and leveraging opportunities to achieve success in the field of smart computing.

Dr. Rohit Kanauzia, Head of the Cyber Security department, shared insights into the rapidly evolving landscape of technology and the myriad opportunities it presents to students. He encouraged students to embrace innovation, continuous learning and adaptability to thrive in this dynamic environment.



Following the opening remarks, the floor was opened for discussions. Students actively participated, sharing their experiences, concerns and aspirations. They discussed various challenges they encounter in their academic journey, such as coursework, time management and career uncertainties. Additionally, students exchanged ideas on how to leverage opportunities such as internships, research projects and networking events to enhance their skills and broaden their horizons.

The interaction provided a conducive environment for students to network, collaborate and support each other. Through shared experiences and mutual encouragement, students gained confidence and motivation to overcome obstacles and pursue their goals in the field of smart computing.

#### 3. Student Advisory Board Meeting: Fostering Collaboration and Engagement

On the 6<sup>th</sup> of February 2024, the Department of Cyber Security convened a pivotal Student Advisory Board meeting,

marking a significant opportunity for collaboration and engagement. This gathering provided a platform for students to voice their perspectives, concerns and ideas, contributing to the ongoing enhancement of academic programs and student experiences.

During the meeting, students actively participated in discussions covering a range of topics, including curriculum development, extracurricular activities and campus initiatives. Their valuable insights and feedback served as catalysts for constructive dialogue, paving the way for positive changes and improvements within the department.

Through this collaborative forum, the department reaffirmed its commitment to student-centered decision-making and continuous improvement.



The Student Advisory Board meeting exemplified the spirit of partnership between students and faculty, fostering a vibrant and inclusive academic community.

#### 4. Academic Excellence Review Meeting

On March 16th, 2024, a crucial review meeting on Academic Excellence was conducted by Dr. B.M Singh, the Pro-Vice Chancellor, COER University. The meeting, held at the Computing Block, aimed to assess and enhance academic standards within the College of Smart Computing. Dr. Rohit Kanauzia, Head of the Cyber Security department, other heads of the College of Smart Computing and all faculties of the college were present. Additionally, Dr. Mridula, Dean of the Internal Quality Assurance Cell (IQAC), also participated in the meeting.

The review meeting commenced with an opening address by Dr. B.M Singh, emphasizing the importance of academic excellence in maintaining the University's reputation and fostering student success. He highlighted the need for continuous improvement and innovation in teaching, research and learning practices.

Dr. Rohit Kanauzia, representing the College of Smart Computing, provided an overview of the current academic landscape within the department. He shared insights into

student performance, faculty engagement and other initiatives undertaken by the department.



Dr. Mridula, Dean of IQAC, offered valuable insights into quality assurance mechanisms and accreditation standards. She emphasized the importance of data-driven decision-making and continuous evaluation to ensure academic excellence and institutional effectiveness.

The meeting concluded with the identification of key action points and strategies to enhance academic excellence within the College of Smart Computing.

The review meeting on Academic Excellence led by Dr. B.M Singh served as a productive platform for evaluating and enhancing educational standards within the College of Smart Computing.

The active participation of faculty members, department heads and IQAC representatives facilitated meaningful discussions and the identification of actionable recommendations.

#### 5. Meeting with 3rd Year Students: Academic Guidance and Engagement

On March 18th, 2024, Dr. Ankush Mittal, the Hon'ble Vice Chancellor, COER University, conducted a meeting with all 3<sup>rd</sup> year students of the College of Smart Computing.

The meeting aimed to address various academic and administrative matters relevant to the students' academic journey. Dr. Rohit Kanauzia, Head of the Department of Cyber Security and other heads of the College of Smart Computing were also present during the meeting. A total of 108 students participated in the session.

The meeting covered a range of topics pertinent to the academic and overall growth of the 3<sup>rd</sup> year students. The agenda included discussions on academic performance, upcoming examinations, project submissions, internship

opportunities and any other concerns or queries students may have had.



**Academic Performance Review:** Dr. Ankush Mittal initiated the meeting by discussing the importance of academic excellence and encouraged students to maintain high standards of performance. He emphasized the significance of consistent effort and effective time management for achieving academic success.

**Examination Preparation:** Guidance regarding the preparation strategies for upcoming examinations was provided to the students. Tips on effective study techniques, revision schedules and managing exam stress were shared to help students perform well in their assessments.

**Internship Opportunities:** Information regarding available internship opportunities in the field of computing was discussed. Students were encouraged to explore internship programs to gain practical experience and enhance their skills.

**General Queries and Concerns:** The floor was opened for students to raise any academic or administrative queries they had. Various concerns related to curriculum, extracurricular activities and campus facilities were addressed by the Vice Chancellor.

The meeting concluded with a reaffirmation of the University's commitment to providing a supportive and conducive learning environment for all students. The session served as a platform for students to receive guidance and clarification on academic matters, ensuring their continued progress and success in their academic journey.

### 6. Academic Integrity: Mid-Term Examination Question Paper Moderation

On March 23, 2024, the Department of Cyber Security conducted the 2nd Mid-Term Examination Question Paper Moderation Board Meeting, starting from 10:00 AM onwards at the Computing Block. This important session aimed to ensure the quality and integrity of the examination question papers.

During the meeting, faculty members meticulously reviewed and moderated the question papers to maintain fairness and relevance to the course curriculum. The process involved thorough scrutiny of the questions to ensure clarity, accuracy and alignment with the learning objectives.



By conducting such moderation sessions, the department reaffirms its commitment to upholding academic standards and providing students with assessments that accurately reflect their knowledge and understanding of the subject matter.

### EMPOWERING FUTURES: STUDENT ENGAGEMENT IN COMPLETION, PLACEMENT AND ADVANCEMENT

#### 1. Software Developer : Grazitti Interactive



A final year student, Praful Gupta has been selected by Grazitti Interactive in their recent Recruitment Drive held on 12th January 2024.

Praful Gupta has clinched the coveted position of Software Developer, a testament to his hard work, dedication and proficiency in the field. His selection stands as a testament to his exceptional skills and aptitude, reflecting positively on his academic journey and preparation.

The package offered to Mr. Praful Gupta is an impressive 3 LPA, underscoring the value that Grazitti Interactive sees in his potential and capabilities. This opportunity not only serves as a significant milestone in Praful Gupta's career but also speaks volumes about the quality of education and grooming provided by the University.

## 2. Kartavya Bhardwaj excels in data analytics and visualization with multiple certifications from Accenture and Google

Kartavya Bhardwaj, a final year student, has recently achieved commendable success by completing multiple certifications in the field of data analytics and visualization. From November 2023 to March 2024, Kartavya undertook the "Data Analytics and Visualization Job Simulation" certification offered by Accenture, where he gained practical insights and experience in applying data analytics techniques to real-world scenarios. Additionally, Kartavya completed several certifications provided by Google, including "Share Data through the Art of Visualization" on March 6, 2024, "Process Data from Dirty to Clean" on January 21, 2024 and "Analyze Data to Answer Questions" on February 5, 2024.

These certifications equipped Kartavya with essential skills and knowledge in data visualization, data cleaning and data analysis, enhancing his proficiency in handling and interpreting complex datasets. Kartavya's dedication to acquiring these certifications demonstrates his proactive approach towards self-improvement and readiness to excel in the field of data analytics and visualization. Such accomplishments underscore Kartavya's commitment to personal and professional development, positioning him as a promising talent in the realm of data science and analytics.

## 3. Internship in Python Programming at CodSoft

Krishna Arora, a second-year student, has recently received a promising internship offer from CodSoft, specializing in Python programming.

This internship opportunity serves as a testament to Krishna's proficiency and expertise in Python programming, showcasing his dedication and skills in this widely-used programming language. As Python continues to gain prominence across various industries for its versatility and efficiency, Krishna's internship offer highlights his potential

to contribute meaningfully to software development projects and coding initiatives.



This accomplishment underscores Krishna's proactive approach towards career development and readiness to gain practical experience in his field of study. This internship opportunity represents an exciting milestone in Krishna's academic and professional journey, paving the way for future success in the field of software development and programming.

## 4. Pradhumay Gaur excels in AI and data analytics with certifications from IBM and Coursera

Pradhumay Gaur has recently attained notable achievements by completing multiple certifications in diverse areas of expertise. Commencing with a certification from IBM titled "Generative AI: Prompt Engineering Basics" on March 23, 2024, Pradhumay delved into the fundamental concepts and practices of generative artificial intelligence, expanding his knowledge in this innovative field. Continuing his pursuit of knowledge, Pradhumay completed the "Promptly for Beginners: Build a Generative AI App" certification offered by Coursera on March 26, 2024, further honing his skills in developing generative AI applications.

Additionally, Pradhumay undertook two certifications from IBM, focusing on data visualization and analysis. On March 5, 2024, he completed the "Data Visualization and Dashboards with Excel and Cognos" certification, enhancing his proficiency in creating visually compelling data representations. Earlier, on January 28, 2024, Pradhumay acquired essential skills in data analysis by completing the "Excel Basics for Data Analysis" certification from IBM. These certifications underscore Pradhumay's commitment to continuous learning and professional development. His diverse skill set in generative AI, data visualization and data analysis positions him as a versatile and knowledgeable

individual ready to excel in various domains of technology and data science.

#### 5. Aman Singh excels in Python Programming with completion of Virtual Internship at CodSoft.

Aman Singh, a 3<sup>rd</sup> year student, recently accomplished by successfully completing a rigorous four-week Virtual Internship program on "Python Programming" hosted by CodSoft. Running from 1<sup>st</sup> to 29<sup>th</sup> February 2024, this intensive program provided Aman with invaluable hands-on experience and practical insights into the intricacies of Python programming. Throughout the internship, Aman delved deep into various aspects of Python, including its syntax, data structures, algorithms and application in real-world scenarios. By actively participating in coding exercises, projects and virtual mentorship sessions, Aman honed his programming skills and gained a deeper understanding of Python's versatility and significance in software development.



This virtual internship experience not only enhanced Aman's technical proficiency but also equipped him with valuable problem-solving and critical thinking abilities essential for success in the field of computer science and programming. Aman's dedication and determination to excel in Python programming are commendable and this internship accomplishment serves as a testament to his commitment to continuous learning and professional growth.

#### 6. Elevating Excellence: Students Shine at Technext Exposition, Securing 2nd Position and Investor Choice Award

Jalaj Singh and Pratham Balodi, both 3<sup>rd</sup> year students of the Department of Cyber Security, achieved significant success at the Technext Exposition held at VIT Vellore on 22<sup>nd</sup> and 23<sup>rd</sup> February 2024. This report highlights their remarkable

accomplishment in winning the Investor Choice Award and securing the 2nd position at the prestigious event.



The Technext Exposition at VIT Vellore is renowned for showcasing innovative projects and technological advancements across various domains. The event provides a platform for students from diverse backgrounds to present their projects, compete and network with industry experts, investors and fellow participants.

Jalaj Singh and Pratham Balodi, representing the Department of Cyber Security, COER University, participated in the Technext Exposition with their innovative project. Their project garnered widespread acclaim and recognition, leading to their remarkable success at the event. Notably, they clinched the prestigious Investor Choice Award, reflecting the potential and marketability of their project. Additionally, their project secured the 2nd position overall, further underscoring their excellence and expertise in the field.

Jalaj Singh and Pratham Balodi's success at the Technext Exposition is a testament to their ingenuity, dedication and technical prowess. Their achievement not only brings honor and recognition to themselves but also elevates the reputation of COER University on a national platform. It serves as inspiration for future generations of students and underscores the importance of innovation and creativity.

#### 7. Redefining Excellence: Students Dominate National Hackathon with 1st Place Victory

Jalaj Singh and Pratham Balodi, the 3<sup>rd</sup> year students of the Department of Cyber Security, achieved a remarkable feat by securing the 1<sup>st</sup> position at a National Level Hackathon held at Aitam andhra Pradesh. The hackathon took place from February 27<sup>th</sup> to 29<sup>th</sup>, 2024 and witnessed fierce competition from across the country. This report aims to

detail their success and highlight the significance of their achievement.

The National Level Hackathon held at Aitam andhra Pradesh, garnered substantial attention, attracting over 750 registrations from aspiring participants nationwide. However, only 50 teams were selected to compete in the offline round, where Jalaj Singh and Pratham Balodi represented the Department of Cyber Security, COER University, with exceptional skill and dedication.

The competition featured participants from renowned institutions such as KERALA, IIT Chennai, Chandigarh University and many more prestigious organizations across the country. The event spanned three days, during which participants engaged in intense coding challenges, problem-solving exercises and innovative project development within the realm of cyber security.

The success of Jalaj Singh and Pratham Balodi at the National Level Hackathon not only reflects their individual capabilities but also brings immense pride and acclaim to the Department of Cyber Security and COER University as a whole.

The achievement of Jalaj Singh and Pratham Balodi in securing the 1st position at the National Level Hackathon is a testament to their talent, hard work and dedication. Their success brings honor to the Department of Cyber Security and COER University, showcasing the institution's commitment to nurturing cyber security professionals of exceptional caliber. It serves as inspiration for future generations of students and underscores the importance of hands-on learning, innovation and perseverance in the field of cyber security.

### **8. Clinched 3<sup>rd</sup> Place at CMR Hyderabad's Hackathon**

Jalaj Singh and Pratham Balodi, third-year students of the Department of Cyber Security, showcased their exceptional talent and skills by securing the 3<sup>rd</sup> position at the 36-hour Hackathon held at CMR Hyderabad on March 1st and 2nd, 2024.

In this fiercely competitive event, Jalaj and Pratham demonstrated their innovation, problem-solving abilities and technical expertise, earning recognition among top contenders from various institutions. Their achievement underscores the Department of Cyber Security's commitment to nurturing talent and empowering students to excel in real-world challenges.

The CMR Hyderabad Hackathon provided participants with a unique platform to collaborate, innovate and address pressing issues. Jalaj and Pratham's success is a testament to their dedication, hard work and innovative thinking, inspiring their peers and professionals alike.

The department extends congratulations to Jalaj Singh and Pratham Balodi for their outstanding performance and wishes them continued success in their academic and professional pursuits.

### **9. Stars Shine Bright: Winner's at KR Mangalam University Hackathon**

Jalaj Singh and Pratham Balodi, third-year students of the Department of Cyber Security, showcased their exceptional skills and expertise by securing the 1st position at the 72-hour Hackathon held at KR Mangalam University from 5<sup>th</sup> to 7<sup>th</sup> March 2024.

In this fiercely competitive event, Jalaj and Pratham demonstrated outstanding innovation, problem-solving abilities and technical prowess, distinguishing themselves as top contenders among their peers. Their remarkable achievement not only reflects their dedication and commitment to excellence but also highlights the exceptional quality of education and training provided by our Department of Cyber Security.

The Hackathon provided participants with a platform to showcase their talents, collaborate with like-minded individuals and tackle real-world cyber security challenges head-on. Jalaj and Pratham's success is a testament to their hard work, perseverance and innovative thinking and serves as an inspiration to their fellow students and aspiring professionals.

The department extends congratulations to Jalaj Singh and Pratham Balodi for their remarkable accomplishment and wish them continued success in their future endeavors. Their victory underscores the Department of Cyber Security's commitment to nurturing talent, fostering innovation and empowering students to excel in the dynamic field.

Let us celebrate their achievement and continue to support and encourage our students as they strive for excellence and make meaningful contributions to the landscape.

### **10. Celebrating Success: Felicitation of Hackathon Achievers**

On 29<sup>th</sup> March 2024, the Department of Cyber Security a ceremony to honor the outstanding achievements of Jalaj Singh and Pratham Badoni, the 3<sup>rd</sup> year students. They showcased their exceptional talent and prowess in recent Hackathon competitions hosted by institutions including KR Manglam University, Aitam, VIT Vellore and CMR Hyderabad. Presided over by Hon'ble Vice-Chancellor, COER University, the ceremony transcended a mere recognition event. Dr. Rohit Kanauzia, the Head of the Cyber Security department and Associate Dean of Training and Placement, graced the occasion with his distinguished presence.

The felicitation ceremony served as a platform to applaud the dedication, innovation and hard work demonstrated by Jalaj Singh and Pratham Badoni.



Their achievements not only brought laurels to themselves but also reflected positively on the entire University community.

The felicitation ceremony will be remembered as a pivotal moment in the journey of these bright individuals, motivating them to continue pushing boundaries and striving for excellence in all their endeavors.

### EMPOWERING EDUCATORS: PUBLICATIONS AND FACULTY UPSKILLING INITIATIVES

#### 1. Noteworthy Accomplishment in Advanced Excel

Ms. Akanksha Jain, a valued Teaching Assistant, has recently completed an intensive 4-week online training program centered on Advanced Excel.



Throughout this comprehensive course, Ms. Jain has delved deep into the intricacies of Excel, mastering advanced

features and techniques that are instrumental in data analysis, visualization and automation. Her dedication and commitment to honing her skills in this critical tool have been truly commendable.

Ms. Akanksha Jain's newly acquired expertise in Advanced Excel will undoubtedly bring added value to our department. Her enhanced proficiency will not only empower her to better support faculty and students but also enrich the learning experience within our academic community.

We extend our congratulations to Ms. Akanksha Jain on this significant achievement.

#### 2. Mr. Sharad Singh & Dr. Rohit Kanauzia for securing a grant for Bharat Gyan Samagan 2024

Mr. Sharad Singh, Assistant Professor and Dr. Rohit Kanauzia, Head of the Department of Cyber Security, have secured a seed grant of ₹ 3,05,000/- (Three Lakhs Five Thousand only) for Bharat Gyan Samagan 2024. This grant was awarded by the Uttarakhand Science Education and Research Centre (USERC), Dehradun, under the auspices of the Government of Uttarakhand, as per letter no. USERC/2023-24/569 dated 5<sup>th</sup> February 2024.

Bharat Gyan Samagan 2024, held on 10<sup>th</sup> February 2024, stands as a testament to the dedication and innovative spirit of our faculty members. This event served as a platform to foster intellectual discourse and promote knowledge exchange among participants from various domains.

The seed grant secured by Mr. Sharad Singh and Dr. Rohit Kanauzia reflects their commitment to advancing scholarly pursuits and promoting academic excellence within University.

#### 3. Exploring the Future: Dr. Rohit Kanauzia Explores Artificial Intelligence at Faculty Development Programme

On the 7<sup>th</sup> of February 2024, Dr. Rohit Kanauzia, Head of the Department, delivered a compelling expert session on "Artificial Intelligence." This session was a part of the Faculty Development Programme hosted by Motherhood University, Roorkee, in collaboration with Uttarakhand Science Education and Research Centre (USERC), Dehradun.

Dr. Kanauzia's expertise illuminated various aspects of Artificial Intelligence, providing attendees with valuable insights into this rapidly evolving field. His session served as a platform for educators to delve into the intricacies of AI and its applications across diverse domains.

Participants benefitted from Dr. Kanauzia's in-depth knowledge and engaging delivery, gaining a deeper



understanding of the principles, advancements and potential implications of Artificial Intelligence.

Overall, Dr. Kanauzia's expert session was a highlight of the Faculty Development Programme, contributing significantly to the professional development of educators and fostering dialogue on the transformative power of Artificial Intelligence in academia and beyond.

#### 4. Ms. Mamta Martolia's Contribution: Reviewer at ICDT-2024

Ms. Mamta Martolia, an Assistant Professor in the department, played a vital role as a Reviewer at the 2nd International Conference on Disruptive Technologies (ICDT-2024) held on March 15th and 16th, 2024. As a Reviewer, Ms. Martolia's expertise and insights contributed significantly to the evaluation process of papers presented at the conference.



Her active participation in ICDT-2024 underscores the department's commitment to engaging with cutting-edge research and innovation in disruptive technologies.

The department extends its appreciation to Ms. Mamta Martolia for her valuable contribution as a Reviewer at ICDT-2024, which enriches our department's reputation as a hub for academic excellence and innovation in disruptive technologies.

#### 5. Faculty Achievement: Mr. Varun Mishra Completes National Level Programme

Mr. Varun Mishra and Ms. Mamta Martolia, Assistant Professors in the department, have achieved a significant milestone by successfully completing a five-day National Level Online Faculty Development Program. This program, focused on "Python Programming with DJANGO Framework for Building Web Applications," was organized by the Department of Computer Science and Engineering at CMR Engineering College, Hyderabad.

Held from 12<sup>th</sup> to 16<sup>th</sup> February, 2024, this intensive program provided participants with comprehensive training

in Python programming and the Django framework, essential skills for modern web application development. Mr. Varun Mishra and Ms. Mamta Martolia's successful completion of this program demonstrates their commitment to staying abreast of the latest advancements in web development technologies.



Their participation in this program not only enhances their own professional capabilities but also enriches our department's academic offerings, ensuring that our students receive the highest quality education in web development practices and technologies.

#### 6. Excels in Geo-Data Sharing and Cyber Security course by IIRS

Ms. Mamta Martolia has recently achieved a significant milestone by successfully completing the online course on "Geo-Data Sharing and Cyber Security," which was organized by the prestigious Indian Institute of Remote Sensing (IIRS), Dehradun.



This course focused on the crucial intersection of geospatial data sharing and cyber security, addressing the growing importance of securing sensitive geographical information in today's digital landscape.

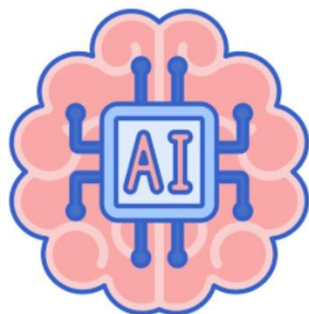
Throughout the course, Ms. Martolia delved into various aspects related to the secure sharing and management of geo-data, exploring best practices, emerging technologies and regulatory frameworks. By completing this course, Ms.

Martolia has not only expanded her knowledge and expertise in geospatial data and cyber security but has also demonstrated her commitment to professional development and staying abreast of industry trends.

Her accomplishment reflects positively on her dedication to continuous learning and her proactive approach towards acquiring new skills and knowledge in her field.

#### 7. Research Proposal: Leveraging AI for Landslide Prediction in Northern India

The collaborative effort of Dr. Rohit Kanauzia, the Head of Department and Ms. Soumya Upadhyay, Assistant Professor, Department of Cyber Security has culminated in the submission of a research proposal titled "Use of Computational Modelling and Artificial Intelligence Techniques for Geographic Landslide Prediction & Detection in Northern India's Mountainous Regions."



The impetus behind this research endeavor stems from the pressing need to address the recurring issue of landslides in the rugged terrains of Northern India. These natural disasters pose significant threats to human lives, infrastructure and the environment.

The research proposal, meticulously crafted and submitted under the ambit of the Project Proposals for Innovative R&D in Emerging Areas of Information Technology, signifies a concerted effort to leverage cutting-edge technology for societal benefit.

By harnessing AI algorithms, predictive modeling and data analytics, the project aims to develop sophisticated systems capable of accurately predicting and detecting potential landslide occurrences.

The proposal's submission to the Ministry of Electronics & Information Technology underscores the department's commitment to addressing critical challenges through interdisciplinary research and innovation.

This initiative aligns with the ministry's vision to foster advancements in emerging areas of information technology, with a focus on addressing real-world problems. As the research team eagerly awaits the outcome of the proposal evaluation process, anticipation mounts for the potential impact of their pioneering work.

#### 8. Excels in National Python Programme

Ms. Anshoo Bhatia & Ms. Akansha Jain, has successfully completed a rigorous Seven-Day National Level Faculty Development Programme on Python, hosted by Star International from 19<sup>th</sup> to 25<sup>th</sup> March 2024.



The program offered an intensive exploration of Python, a vital programming language widely used in various fields, including computer science, data science, artificial intelligence and more. Through this comprehensive course, they delve deep into Python's fundamentals, advanced features and practical applications.

The successful completion of this programme not only demonstrates their commitment to continuous learning but also underscores their dedication to enhancing their expertise in programming languages.

#### 9. Faculty Excellence in Cyber Security: IBM Certification Achieved

Dr. Rohit Kanauzia, Head of the Department, along with Renu Bahuguna and Mr. Shobhit Prajapati, Assistant Professor's in the department, have accomplished the IBM Faculty Buildathon Training on "Cyber Security and SIEM (Powered by QRadar)." This training marks a significant stride in enhancing our faculty's expertise in the critical field of cyber security.

The completion of the training program demonstrates the department's commitment to staying at the forefront of technological advancements.

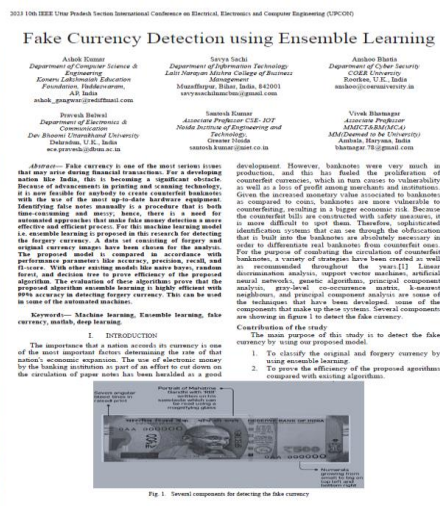
Dr. Kanauzia, Renu Bahuguna and Mr. Prajapati's participation highlights their dedication to continuous learning and professional development, enriching the academic community with valuable insights and skills in cyber security powered by QRadar technology.



Their achievement not only strengthens the department's capabilities but also reinforces our commitment to providing cutting-edge education and training in cyber security.

### 10. Research Paper in UPCON IEEE Conference

Ms. Ashoo Bhatia, an Assistant Professor in the department, has achieved a notable milestone in her academic journey. Her scholarly contribution, a paper titled "Fake Currency Detection using Ensemble Learning," has been selected for publication in the prestigious 10th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON).



This conference serves as a platform for scholars, researchers and industry professionals to exchange insights

and discuss advancements in the fields of electrical, electronics and computer engineering.

In her paper, Ms. Bhatia delves into the application of ensemble learning techniques to address the critical issue of counterfeit currency detection. By leveraging ensemble learning, which combines the predictive power of multiple algorithms, Ms. Bhatia proposes a novel approach to enhance the accuracy and efficiency of counterfeit detection systems. Her research not only demonstrates a deep understanding of machine learning methodologies but also highlights her commitment to addressing real-world challenges with innovative solutions.

The paper can be accessed DOI: 10.1109/UPCON59197.2023.10434736.

### 11. Research Success: Paper on Heart Disease Prediction Published in International Journal

Ms. Renu Bahuguna, Assistant Professor in the department, has achieved a significant milestone by successfully publishing her research paper titled "Heart Diseases Prediction using Machine Learning Techniques and Preventive Measures To Overcome From Heart Attacks Problems In Present Era" in the International Journal of Emerging Technologies and Innovative Research.

In her paper, Ms. Bahuguna explores the application of machine learning techniques in predicting heart diseases, addressing a critical health concern in the present era. Her research delves into preventive measures to mitigate the risks of heart attacks, offering valuable insights for healthcare professionals and policymakers.



### Heart Diseases Prediction using Machine Learning Techniques and Preventive Measures To Overcome From Heart Attacks Problems In Present Era

**Abstract:** The primary goal is to give the existing guidance on maintaining their health system and advice on how to utilize this prediction to identify their disease. Informed users can support the healthcare business, which is crucial in today's world where patients' illnesses are often treated, and users can benefit from this information in the event that they choose not to visit the hospital. Coronary heart disease is the primary cause of heart attacks. In an effort to prevent heart attacks, the NHERI funded International Study of Comparative Health Effectiveness with Medical and Invasive Approaches (CHEMIA) trial external link evaluated different coronary heart disease treatments. According to the trial, medication and healthy lifestyle choices can lower the risk of a heart attack just as well as major surgeries in those with severe coronary heart disease. Physicians will be better able to choose the best course of action for patients who are at risk of having a heart attack according to the findings of this study.

**Keywords:** Coronary, NHERI, CNN, Machine Learning

**1. INTRODUCTION**

The goal of "Heart Disease Forecasting" is to accurately diagnose a patient's condition based on both the signs and general health information. The disease is treated if this prediction is fulfilled during the early phases of the illness with the help of this project and all other required steps [1]. The illness prediction model's ultimate goal is to offer forecasts for a range of often occurring illnesses that, if neglected or left untreated, can develop into more serious conditions that can create a host of issues for both the patient and those closest to them [2]. Prediction This model will predict the most likely disease based on the symptoms. The healthcare industry lacks information and knowledge, and it is a massive industry with a lot of work left to be done. So, with the help of these algorithms and techniques, we have completed the project that can assist those in need. Heart Disease is one of the world's most lethal diseases [3]. The patient must go to hospital to get their results after consultation. However, with the growth of the machine learning algorithm we have ability to find a solution for this problem because we have advanced system. Heart disorders are among the deadliest but silent killers of people, which leads to an annual rise in the death rate of those affected. In 2016, the World Health Organisation (WHO) revealed that heart disease is the cause of 17.5 million deaths globally annually. In the healthcare industry, vast amounts of diverse data are produced every day, and it is crucial to gain knowledge from these data. By creating models from the medical records information, different data mining approaches can be used to extract this knowledge. We put into practice a machine learning-based approach that uses

Published in the March 2024 issue of the journal, Ms. Bahuguna's paper contributes to the growing body of knowledge in the field of healthcare technology and

underscores our department's commitment to cutting-edge research and innovation.

The paper is accessible via the following link: <https://www.jetir.org/view?paper=JETIR2403186>

### 12. Celebrating Academic Achievement: Paper at IEEE UPCON

Ms. Mamta Martolia, Assistant Professor in the department had presented a paper titled "Exploring Cyber security Research Areas, Categories and Limitations Using an Interdisciplinary Approach" at the prestigious 10th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON) in 2023.

Exploring Cybersecurity Research Areas, Categories, and Limitations Utilizing an Interdisciplinary Approach

Publisher: IEEE [Cite This](#) [PDF](#)

Vinayak Mittal | Mamta Martolia | Payal Chhabra | Arun Pratap Srivastav | All Authors

13 Full Text Views

**Abstract**  
 Document Sections  
 I. Introduction  
 II. Literature Survey  
 Cybersecurity

**Abstract:**  
 Rapid technological advances have brought unprecedented levels of connectivity and security, but also new and complex cybersecurity challenges. The purpose of this paper is to provide an in-depth insight into current cybersecurity research areas, divided into specific areas and defined boundaries in each Poetry, Cryptography, Law, Psychology. It also integrates ideas from other relevant fields in the face of increasing cyber threats, this paper provides a comprehensive insight into the multifaceted aspects of cybersecurity, Computer science, cryptography, law, psychology, research in related fields, applying central topic vision, studying current security research fields, analyzing on the side in human areas, establishing each place, major research highlights and

Her presentation at this conference underscores her dedication to advancing knowledge and research in the field of cyber security. Ms. Martolia's paper delved into critical aspects of cyber security research, offering valuable insights into various areas, categories and limitations through an interdisciplinary lens.

### 13. Research Publication: Ms. Renu Bahuguna's Contribution to Heart Disease Prediction

Ms. Renu Bahuguna has authored a research paper titled, "Heart Diseases Prediction using Machine Learning Techniques and Preventive Measures To Overcome From Heart Attacks Problems In Present Era." This insightful paper has been successfully published in a UGC approved journal. Ms. Bahuguna's research addresses the critical issue of heart disease prediction using advanced machine learning techniques. Her work not only contributes to the advancement of knowledge in this field but also provides valuable insights into preventive measures to mitigate the risks of heart attacks in the present era.

This publication underscores Ms. Bahuguna's dedication to conducting impactful research and her commitment to addressing real-world challenges through innovative approaches.



Her achievement reflects positively on our department and reinforces our commitment to promoting excellence in research and scholarship.

### 14. Research Milestone: Ms. Renu Bahuguna's Publication on Driver Drowsiness Detection

Ms. Renu Bahuguna, an Assistant Professor in the department, has achieved a significant milestone by authoring a research paper titled, "Driver Drowsiness Detection using Machine Learning Technique." This groundbreaking paper has been successfully published in Springer, a renowned academic publisher known for its high-quality research publications.

#### Driver Drowsiness Detection System Using Machine Learning Technique

Conference paper pp 13–23 | Cite

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[View author publications](#) You can also search for this author in [PubMed](#) | [Google Scholar](#)

Neha Paliwal, [Renu Bahuguna](#), Deepika Rawat, Isha Gupta, Arjun Singh & Saurabh Bhardwaj

Part of the book series: [Communications in Computer and Information Science](#) ((CCIS, volume 2053))

Ms. Bahuguna's paper addresses the critical issue of driver drowsiness detection, utilizing advanced machine learning techniques to enhance road safety. Her innovative approach to utilizing technology for the prevention of accidents due to driver fatigue is both timely and impactful.

This publication highlights Ms. Bahuguna's dedication to conducting cutting-edge research and her commitment to addressing real-world challenges through interdisciplinary approaches. Her accomplishment reflects positively on our department, showcasing the commitment to fostering excellence in research and scholarship.

### Forthcoming in April to June 2024

1. Parent's Day
  2. Mid Term Exam MTE-II
  3. Workshop on Career Opportunities
  4. Outreach Activities.
  5. Project Based Learning
  6. Workshop of Cyber Security
  7. End Semester Examination
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*Thank you for being a part of our journey! Stay vigilant, stay secure and stay connected with us for more updates and insights. Until next time, keep your digital world safe!*

*We are constantly striving for excellence and value your input. Please feel free to share your feedback and suggestions with us at [hod.cy@coerUniversity.ac.in](mailto:hod.cy@coerUniversity.ac.in). Your insights are important to us.*




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