



**VIGNANA BHARATHI**  
Institute of Technology

(U.G.C. Autonomous Institution, Accredited by NBA and N.A.A.C. ('A' Grade)  
Approved by A.I.C.T.E., Affiliated to J.N.T.U., Hyderabad.)

# DEPARTMENT OF CYBER SECURITY

»»» **NEWSLETTER**

JUNE 2023 - MARCH 2024



# SAGGANIKA

“Resilient Digital Horizons”

సజ్జణికా



**VOLUME - 01**



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# GOVERNING BODY



## DR. N. GOUTHAM RAO

Dr. N. Goutham Rao is the Chairman of VBIT. Sir has a Doctorate in Sociology, he has successfully completed many projects launched by Osmania University under UG's special Assistance Programme.

## DR. G. MANOHAR REDDY

Dr. G. Manohar Reddy is the Secretary of VBIT. Sir is a gold medalist in M.Sc. Chemistry in the year 1998. Sir takes time to teach Chemistry and be with the students.



## DR. P. V. S. SRINIVAS

Dr. P. V. S. Srinivas is the principal, professor in the Department of Computer Science Engineering at VBIT. Sir has Ph. D. in Computer Science Engineering from JNTUH. Sir is the senior member at IEEE and IAENG.

## CYBER SECURITY INSIGHTS

### NEWSLETTER OF CSE(CS) DEPARTMENT

JUNE-2023 TO MARCH-2024

" Resilience depends on cyber security just as much as breathing "

### ABOUT THE INSTITUTION

Vignana Bharathi Institute of Technology emerged as a hub for engineering excellence. At VBIT, students will discover engineering in a different light. Students will experience an engineering education that is on par with the industry requirement.



#### MISSION:

To establish a strong institute by consistently maintaining state of the art infrastructure and a cohesive, world class team by providing need based technical education.

#### VISION:

To emerge as a premier institution for technical education in the country through academic excellence and to be recognized as a center for excellence in Research and Development.

#### RESEARCH:

Conceptual teaching along with research and development makes the institute unique and provides an opportunity to produce competent and employable engineers with a broader outlook.



# FROM THE HOD'S DESK



## DR. P. SUSHMA

*HoD of Computer Science  
and Engineering (Cyber  
Security)*

**" DIGITAL LIFE THRIVES  
WITH CYBERSECURITY  
RESILIENCE "**

**Dr. P. Sushma** is a distinguished figure in the realms of computer science and cyber security, holding a Ph.D. from Osmania University and occupying the role of **Head of Department for Computer Science and Engineering** (Cyber Security) at Vignana Bharathi Institute of Technology, Hyderabad. Her extensive career includes positions as a lecturer, associate professor, and HOD at esteemed institutions such as Loyola Academy and KRR Institute of Information Technology. Dr. Sushma's impactful contributions to academia are evident through her numerous publications in respected journals and conferences, with a focus on pivotal areas like IoT security, network monitoring, and encryption algorithms. Additionally, her commitment to holistic well-being is reflected in her certification as a yoga teacher, actively engaging in workshops and seminars to promote awareness and wellness. With a versatile technical skill set spanning operating systems, programming languages, web technologies, databases, and cyber security tools, Dr. Sushma emerges as a dynamic and forward-thinking leader within the ever-evolving landscape of computer science and cyber security.

# DEPARTMENT OF CSC



## MR. K. ASHOK

*Mr. K. Ashok is the Associate Professor of Computer Science and Engineering (Cyber Security) at VBIT. Sir has a M.Tech in Computer Science Engineering. Sir has published 1 paper, and sir has completed NPTEL certification on "Digital Forensics" in the year 2023.*

## MS. P. CHANDRA MOUNIKA

*Ms. P. Chandra Mounika is the Assistant Professor of Computer Science and Engineering (Cyber Security) at VBIT. Ma'am has a M.Tech in Information Technology. Ma'am has attended many faculty development programmes and shared her knowledge.*



## MS. FAROZA SHAMSHEEM

*Ms. S. Faroza is the Assistant Professor of Computer Science and Engineering (Cyber Security) at VBIT. Ma'am has a M.Tech in Computer Science. Ma'am has shared her knowledge by attending several faculty development programs.*

## MS. V. MADHUMALA

*Ms. V. Madhumala is the Assistant Professor of Computer Science and Engineering (Cyber Security) at VBIT. Ma'am has a M.Tech in Computer Science and Technology. Ma'am has completed NPTEL certification on "Problem solving through programming in C" in the year 2023.*



## MS. V. RAJYALAKSHMI

*Ms. V. Rajyalakshmi is the Assistant Professor of Computer Science and Engineering (Cyber Security) at VBIT. Ma'am has a M.Tech in Computer Science and Technology. Ma'am has shared her knowledge by attending several faculty development programs and workshops.*

## »»» ABOUT THE DEPARTMENT

The Department of computer science and Engineering in Cyber Security (CSE-CS) was established in the year 2020 with the aim of providing inclusive technology education to students and thereby creating responsible citizens who would contribute to the betterment of their families, society and nation. The department has well equipped computing laboratories and a repository of software covering a wide spectrum of applications.

### »»» MISSION:

To enhance the knowledge and skills of the students through effective teaching and learning processes to become cybersecurity professionals with the technical expertise and passion needed to protect digital assets. To familiarize students with the latest tools and methodologies to combat cyber threats and identify and mitigate cyber-attacks in cyberspace. To inculcate the habit of attaining firm ethical grounding by conforming to IT laws and nurturing research abilities.



### »»» VISION:

To be a center of excellence through innovative education, research and collaborative partnership, with strong ethics and adaptability to raise cyber awareness, build robust defense, and foster a cyber-resilient ecosystem that safeguards critical information and digital assets.



# »»» ABHEDYA

## CYBER SECURITY FORUM OF VBIT



### ABHEDYA CLUB

Abhedya, VBIT's Cyber Security forum, launched on April 14th, 2022. With the guidance of Dr. P. Sushma with faculty coordination by Ms. K. Keerthana. Abhedya is dedicated to enhancing cyber literacy, inspiring engineers to explore Ethical Hacking, Penetration Testing, Cloud, Network, and IoT Security domains. By fostering a culture of continuous learning, This initiative, spanning diverse cybersecurity areas, aims to mold adept professionals for the future.

### MISSION:

Our cybersecurity club ignites student's passion for security science and technology. We build a knowledgeable community proficient in cybersecurity. Our workshops, lectures, hackathons, and competitions enhance technical skills. Networking opportunities connect students with industry professionals. We advocate for cybersecurity awareness to contribute to a safer digital ecosystem.

### VISION:

Our club envisions a fortified world where education, innovation, and collaboration shield individuals, organizations, and nations from cyber threats. As a leading student organization, we aspire to inspire and equip the next generation of cybersecurity professionals for the intricacies of our digital age. To achieve this, we're dedicated to creating a dynamic and inclusive community, fostering passion for cybersecurity and related disciplines among students.



# E-HACK

## E-HACK WAS CONDUCTED ON SEPTEMBER 15TH AND 16TH, 2023.

The E-Hack event, hosted by Sytech Labs Pvt. Ltd., in collaboration with VBIT and the Department of Cybersecurity along with ABHEDYA-the cybersecurity forum, was a comprehensive two-day program aimed at educating students about the ever-evolving field of cybersecurity. The event featured a live demonstration of cyber threats worldwide, including malware, phishing, and exploits, illustrating the real-time nature of cyber threats. Throughout the event, attendees delved into a wide array of cybersecurity topics, including discussions on internet connectivity via optical fibers, the historical timeline of Cyber-attacks, and the essential steps to take when encountering a Cyber-attack. Expert presentations, interactive sessions, practical demonstrations, and the presence of celebrities like Mr. Akhil Sarthak and Mr. Soheli Ryan made it engaging and educational. Additionally, the valuable insights shared by dignitaries further enriched the learning experience, leaving a lasting impact on the participants. With the immense support from the HoD of Cybersecurity Dr. P. Sushma ma'am the event was a great success.

# WORKSHOP





## CYBER SECURITY CAREER INSIGHTS WAS CONDUCTED ON 9TH SEPTEMBER, 2023

The Department of Cyber Security held a seminar titled "Cyber Security Careers Insights" on September 9, 2023. Mr. Sandeep Mudalkar, Founder and CEO of Sytech Labs Pvt. Ltd., was our esteemed guest. He provided invaluable perspectives on cybersecurity careers, emphasizing the importance of professionals in protecting our digital world. His insights were deeply rooted in the evolving landscape of cyber threats.



## TECH TALK WAS CONDUCTED ON 23RD DECEMBER, 2023



We were honored to host Mr. M. Kumar and Mr. Abhishek Bharadwaj from CDAC. Their guidance made our event a success, impacting all attendees. Mr. Kumar shared insights on security research and education. He highlighted CDAC-Hyderabad's online courses and internships.

## CYBER TALK WAS CONDUCTED ON 11TH JANUARY, 2024

The Department of Cyber Security conducted an exclusive cyber talk on January 11, 2024. This informative session was exclusively tailored for second-year students and successfully enhanced awareness about cyber crimes, imparting strategies for better protection and providing insights on securing our systems against potential attacks.



GUEST LECTURES

## CSC STUDENTS VISITED BSNL ON 17TH JUNE, 2023

Students of the cyber security department visited BSNL RTTC, Hyderabad. We explored telecom networks and witnessed cutting-edge technology. Emphasis was on network security and data protection. We learned about telecom evolution from 2G to 5G and network structure.



## CSC STUDENTS VISITED T-HUB ON 27TH SEPTEMBER, 2023



Eight students from the Cyber Security Department had the unique opportunity to delve into the world of startups at T-Hub, India's largest incubation center located in Telangana. Through interactions with renowned entrepreneurs, they gained valuable insights into startup dynamics, fostering their understanding of innovation, business strategies, and the entrepreneurial ecosystem.

## CSC STUDENTS VISITED CDAC ON 30TH SEPTEMBER, 2023

Third-year cybersecurity students visited CDAC, gaining insights into research and industry technologies. We marveled at PARAM Padma-II in the Super Computing Laboratory. CDAC's services for government and private organizations impressed us. Exploring diverse technology aspects and discussing internship possibilities left us inspired and well-informed.



## **INTERNATIONAL YOGA DAY WAS CONDUCTED ON 21ST JUNE, 2023**

The Department of Cybersecurity celebrated International Yoga Day with Girija Bai Mam as the guest. The head of the department Sushma Madam, led asanas, emphasizing mental health's importance.



## **KAUSHAL MAHOTSAV WAS CONDUCTED ON 3RD AND 4TH JUNE, 2023**



S. Varun (22P61A6247) and M. Shiva Sai Nath (22P61A6237), second-year Cybersecurity students, actively participated in Kaushal Mahotsav 2023 at NSTI Vidyanagar. The event was organized by Skill India and NSDC.

## **PARENT-TEACHER MEETING WAS CONDUCTED ON 25TH NOVEMBER, 2023**

The Department of Cybersecurity organized a parent-teacher meeting on November 25, 2023. During this session, teachers candidly discussed their observations about the student's performance. They highlighted areas where improvement is needed and provided valuable suggestions to help the students enhance their skills, excel in their studies, and foster personal growth.





## GOOGLE CROWDSOURCE IDEATHON WAS CONDUCTED ON 25TH AUGUST, 2023

R. Meghana (21P61A6252) and B. Priyanka (21P61A6203), third-year Cyber Security students, won second prize in our college's Google Crowdsource Ideathon on August 25, 2023. Their innovative solutions and dedication earned them recognition.



## ANTARANGI DANCE COMPETITION WAS CONDUCTED ON 19TH TO 22ND OCTOBER, 2023



B. Priyanka (21P61A6203) and M. Krishna Srinivas (21P61A6242), cybersecurity students, actively participated in dance. They recently showcased their talent at the 58th Antarangi dance competition organized by IIT Kanpur, inspiring us with their diverse skills.

## RESONANCE 2023 DANCE COMPETITION

B. Priyanka (21P61A6203) of cybersecurity showcased exceptional talent at Resonance 2023, winning a well-deserved third prize. Their captivating performance celebrated creativity and dedication on stage.



## MARTIAL ARTS MERIT CERTIFICATE



M. Krishna Srinivas (21P61A6242), a cybersecurity student, showcased their talent at the All India Inter University Taekwondo Tournament. Their unwavering spirit left an indelible mark in martial arts.

## KABADDI STATE LEVEL COMPETITION

N. Manoj of cybersecurity showcased exceptional talent, winning the 1st prize in a state-level inter-college sports competition. Their captivating performance celebrated creativity and dedication on stage.



# STUDENT INTERNSHIPS



EMERSON

Tutler

coapps

More than 50 students have completed their internships with organizations such as Tutler, Coapps, and Sri Viseshha.

Sri Viseshha  
Serving Technology Better

# STUDENT PLACEMENTS

Collabera<sup>®</sup>  
Digital

coapps

24 +

students have been placed in campus placements for various organizations.





## REVEALING CYBERSECURITY THREATS: INSIGHTS INTO INSIDER AND EXTERNAL RISKS

Growing dependence on technology exposes individuals and organizations to diverse cyber threats, compromising data integrity and confidentiality, necessitating emphasis on user awareness and secure practices for robust cybersecurity.



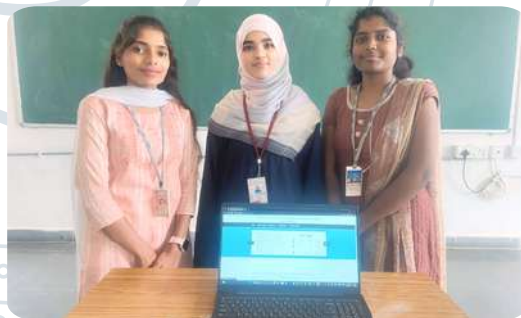
## NEXGEN SIEM MODERN SOC ARCHITECTURE FOR EVOLVING THREAT LANDSCAPE



"NexGen SIEM" enhances SOC capabilities through open-source integration, emphasizing agility, efficiency, and effectiveness for security analysts, fostering a culture of collective intelligence and continuous improvement in cybersecurity.

## A BLOCKCHAIN-BASED SECURITY MANAGEMENT FRAMEWORK FOR CYBER-PHYSICAL SYSTEMS

We propose a Blockchain-based security framework for Cyber-Physical Systems, ensuring data integrity and confidentiality and contributing to CPS security across various domains.



## MULTIMEDIA STEGANOGRAPHY & ENCRYPTION TOOL USING RSA ALGORITHM



This project introduces an all-encompassing Multimedia Steganography Tool with advanced spatial domain techniques, including LSB method, bolstered by RSA encryption, redefining multimedia data protection and secure communication.



# VALUE ADDED PROGRAMS AND VIRTUAL INTERNSHIPS



Cybersecurity students have completed an AICTE internship, where All India Council for Technical Education ensures coordination for the development of technical education.



As Cybersecurity students, we have completed a Salesforce internship, which aims businesses in tracking customer interactions and sales data.



As Cybersecurity students, we have completed an NPTEL course. An NPTEL certificate has benefits and is valuable as it is recognized by IITs and IISC.



As Cybersecurity students, we have completed a ServiceNow internship, a platform used to set up systems that define, manage, automate, and structure IT services for companies.



As Cybersecurity students, we have completed a Fortinet Certification course, working alongside Fortinet teams for several weeks.



Cybersecurity students have completed Coursera certifications that can help enhance their resumes and demonstrate their expertise in specific areas.

# DEPARTMENT TOPPERS

## 2nd Year



**MUKKAMULA  
PAVAN MAHESH**  
22P61A6235  
CGPA: 9.35

**ADEPU THILAK**  
22P61A6202  
CGPA: 9.35



**VANAM KARTHIK**  
22P61A6261  
CGPA: 9.29



## 3rd Year



**GUNDAM NAVYA**  
21P61A6225  
CGPA: 8.88

**SRIRAM  
NIRVIGNA**  
21P61A6258  
CGPA: 8.69



## 4th Year



**CHIMARLA  
DEEKSHITHA**  
20P61A6215  
CGPA: 8.85

**BELLAMKONDA  
AMULYA**  
20P61A6211  
CGPA: 8.74



# EDITORIAL TEAM



**K. SAI KUMAR**  
Editorial Lead



**M. SANJANA GUPTA**  
Editorial CO - Lead



**M. SAI NUSHANTH**  
Student Coordinator



**CH. AKHIL SAMPATH VINAY**  
Graphic Designer



**N. SHRAVANI**  
Content Writer