

GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND P.G. COURSES (A)
ENGINEERING AND TECHNOLOGY PROGRAM
RUSHIKONDA, VISAKHAPATNAM - 530045

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



A

Report

on

Faculty Development Programme

on

Cyber Security and Digital Forensics:

Challenges and Trends

About FDP

The introduction of the internet and its underlying technologies made information security and protecting network infrastructure from various threats a primary concern. Current cyber threats are getting more complicated and advanced with the rapid evolution of adversarial techniques. Networked computing and portable electronic devices have broadened the role of digital forensics beyond traditional investigations into computer crime. Cyber security is everyone's responsibility and needs awareness of the tools and skills to respond to evolving threats. Therefore academicians should possess sufficient skills and knowledge in Security Domain and this FDP is designed towards achieving this goal.

Objectives of FDP

The sessions of this FDP will be handled by a team of distinguished academicians and industry experts who are well-versed in the field of cyber security and digital forensics.

- The objective of this FDP is to introduce fundamentals to promote a solution-based research approach in cyber security through expert sessions and hands-on training to faculty academicians, industry and researchers.
- This program is also intended to explore new dimensions of digital forensics such as internet forensics, social media forensics, and IoT forensics in various emerging fields.
- This program is designed to provide state-of-the-art trends and advancements in cyber security and digital forensics.

Outcomes of FDP

- In this five-day FDP, the participants gain the essential hands-on experience in cyber security.
- Participants can learn about the most important research opportunities in cyber forensics.
- Members may acquire knowledge of various Forensic and Ethical Hacking Tools.
- By way of lectures delivered by industry experts, the most important job-ready skills are addressed and recommendations for teaching digital forensics are offered and discussed in this program.
- This professional development program also supports educators to design the cyber security course and offers a practical approach to teaching digital forensics.

Resource Persons

1. Prof. D. Lalitha Bhaskari
Department of CS & SE, Andhra University.
2. Prof.S.Rajani
Principal,
Gayatri Vidya Parishad College for Degree & PG Courses (A).
3. Dr.N.Rukma Rekha
SCIS, University of Hyderabad,Telangana.
4. Prof. P. Prapoorna Raja,
Department of CSE,
GVPC, VSP.
5. Bhushana Samyuel Neelam,
Sr. Research Engineer - Security,
AlphaAppleton Innovations,
Visakhapatnam.
6. Prof.N.Naga Lakshmi,
Department of Computer Science,
GITAM Deemed to be University.
7. Prof.P.V.Lakshmi,
Department of Computer Science and Engineering,
GITAM Deemed to be University.
8. Prof.I.S.Pallavi,
Department of Computer Science and Applications,
Gayatri Vidya Parishad College for Degree & PG Courses (A)

Who Can Apply

Teachers from various colleges /Institutions / Universities and from Industry Working in related fields are eligible.

Chief Patrons

- 1) Prof.P.Srinivasa Rao , President
Gayatri Vidya Parishad
- 2) Prof.D.Dakshina Murthy, Vice-President
Gayatri Vidya Parishad
- 3)Prof. K P R Sastry, Vice- President
Gayatri Vidya Parishad
- 4) Prof.P.Somaraju , Secretary
Gayatri Vidya Parishad
- 5) Sri V R K S Silva Prasad, Treasurer
Gayatri Vidya Parishad

About Institute

Gayatri Vidya Parishad is an Educational Society established by a group of erudite academicians of Visakhapatnam City in the year 1988 and supported by a number of industrialists and philanthropists of the city.

Gayatri Vidya Parishad started its activities from 28-09-1988. The Society is managed by eminent educationists, philanthropists and technocrats. One of the major aims of the Trust is "To promote, establish, maintain and assist in maintaining educational and other institutions with a view to imparting education in all branches in general and advanced technology, management, education, human and science in particular, and thus to facilitate securing gainful employment to the youth of the country".

The Founding members are a source of inspiration and strength to the institution and their wisdom is reflected in the content and quality of the curriculum for all the courses. All the other members of the Governing Body are eminent academicians, great educationists and social workers who laid strong foundation for the promotion of professional, ethical and human values for this great edifice of academic excellence and continue to guide it to scale new heights over the past three decades.

About Department

The Department of Computer Science and Engineering was started in the year 2011 as Engineering and Technology Program, Gayatri Vidya Parishad College for Degree & PG Courses (A).

The Department offers B.Tech, Computer Science and Engineering program with an intake of 240 Seats (CSE 180 Seats and CSE ,AI & ML - 60 Seats). MTech started in 2020-21 AY with an intake of 12.

Computer Science and Engineering is the branch of Engineering in which the students are trained a practical and theoretical foundations of Information Technology and Computation. The students are exposed to sophisticated computer laboratories and the latest trends in Computer Science and Engineering.

- 6) Prof.P.V.Sarma , Member
Gayatri Vidya Parishad
 - 7) Sri D V Kameswara Rao, Member
Gayatri Vidya Parishad
 - 8) Prof. P Raja Ganapati , Member
Gayatri Vidya Parishad
 - 9) Prof. V S R K Prasad , Member
Gayatri Vidya Parishad
- Patrons**
- 1) Prof.S.Rajani
Principal
Gayatri Vidya Parishad College for Degree and PG Courses (A)
 - 2) Prof. B . V Ramana Murty
Director,Engineering and Technology Program
Gayatri Vidya Parishad College for Degree and PG Courses (A)
 - 3) Dr Nadiminti Venkata Ramana Murty
Professor & HoD, Department of CSE
Engineering and Technology Program
Gayatri Vidya Parishad College for Degree and PG Courses (A)

Convenor

Dr.D.Chandravathi
Associate Professor
Dept of Computer Science and Engineering
Engineering and Technology Program

Co-Convenor

Dr.Bh. Padma
Associate Professor
Dept of Computer Science and Engineering
Engineering and Technology Program

Coordination Committee

Dr. G.R.S.Murthy, Professor
Dr. A.S.S.V. Ram Kumar, Associate Professor
Dr. N.Bhramaaji Rao, Associate Professor
Dr. D. S N Raju, Assistant Professor
Mr. G.Kalyan Chakravathi, Assistant Professor
Mrs. K.Venkata Ratnam, Assistant Professor
Mr R.Kanaka Raju, Assistant Professor
Mrs. L. Prathiba, Assistant Professor
Mr. M.Anil, Assistant Professor
Mr. J A Lavanya, Assistant Professor
Mr. S.Arjun Kumar Yadav, Assistant Professor
Ms DMV Priya, Assistant Professor

5-DAY FACULTY DEVELOPMENT PROGRAMME ON CYBER SECURITY AND DIGITAL FORENSICS - CHALLENGES AND TRENDS 24th - 28th JULY - 2023



(Affiliated to Andhra University | Accredited by NAAC)
(PG - MBA and UG Engineering B.Tech (CE, CSE, ECE and ME) programs are Accredited by NBA)

Visakhapatnam- 530045.

**ENGINEERING AND TECHNOLOGY PROGRAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

5-DAY FACULTY DEVELOPMENT PROGRAMME ON CYBER SECURITY AND DIGITAL FORENSICS - CHALLENGES AND TRENDS 24th - 28th JULY - 2023

REGISTRATION FEE DETAILS

Faculty /Scholar : Rs. 1000 /-
Industry : Rs. 2000 /-
Account Name : GVPCTCSISBC
IFSC Code : SBIN0040546

Google Form Link
<https://forms.gle/Ggcr51Jxj7fhjKr28>

Last date for registration: 15-07-2023

*Note:Attendance is compulsory for all the sessions

VENUE

GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES(A)
Department of Computer Science and Engineering
Rushikonda,
Visakhapatnam- 530045.

CONTACT

Dr.D.Chandravathi
Associate Professor
Department of Computer Science and Engineering
Engineering and Technology Program

E-mail id : chandravathid@gvpcdpcc.edu.in
Contact No : +91- 9951862491

Website : www.gvpcdpcc.edu.in

FDP SCHEDULE

Sl.No	Name of the Resource Person	Date of session	Time Slot	Topic to be discussed
	Inaugural function	24-07-2023	9.00 am -10.30am	
1	Prof. P. V. Lakshmi	24-07-2023 Forenoon	11.15 am -12.30 pm	Basics of Cyber security, importance, and applications
2	Prof. D. Lalitha Bhaskari	24-07-2023 Afternoon	1.30Pm - 3.30 PM	Threat Modelling
3	Bhushana Samyuel Neelam	25-07-2023	10.00 AM-5.00 PM	Foot printing & Reconnaissance Network scanning Enumeration
4	Prof. V. Naga Lakshmi	26-07-2023 Forenoon	10.00 AM- 12.00pm	Cross chain transactions in block chain and attack detection
5	Dr. Rukma Rekha	26-07-2023 Afternoon	1.30 PM - 3.30pm	Role of Block Chain in Cyber security
6	Prof.I.S.Pallavi	27-07-2023 Forenoon	10.00 AM- 12.00pm	Cyber security laws and ethics
7	Prof.S.Rajani	27-07-2023 Afternoon	1.30 PM - 3.30pm	Stress Management
8	Prof. Prapoorna Roja	28-07-2023 Forenoon	10.00 AM- 12.00pm	Network forensics and tools with evidence, graphs and AHP

Introduction:

The 5-Day Faculty Development Programme (FDP) on *Cyber Security and Digital Forensics: Challenges and Trends* took place from July 24 to 28, 2023, at Gayatri Vidya Parishad College for Degree and PG Courses (A), Visakhapatnam. Organized by the Department of Computer Science and Engineering, the FDP aimed to equip faculty members, industry professionals, and researchers with essential skills in cyber security and digital forensics, addressing the latest trends, challenges, and tools in the field.

About the Programme:

The FDP emphasized the critical need for heightened cybersecurity awareness and preparedness. With the rapid evolution of internet technologies and the complexity of cyber threats, this programme provided a timely, intensive curriculum to build foundational knowledge and hands-on experience in cyber defense. Key areas included understanding adversarial techniques, network infrastructure protection, digital forensics, and tools for cyber investigation.

Objectives of the FDP:

1. Introduce participants to the fundamentals of cybersecurity, promoting a solution-oriented approach to research.
2. Enhance knowledge of digital forensics, including internet, social media, and IoT forensics.
3. Provide hands-on training on advanced cybersecurity tools and techniques, enabling practical applications in both academic and industry contexts.

Programme Content and Structure:

The FDP featured sessions led by distinguished academics and industry experts, covering topics from cyber forensics, ethical hacking, and forensics tools to the practical applications of cybersecurity measures. The format combined expert lectures with practical, hands-on exercises, ensuring participants could apply the concepts and tools introduced.

Outcomes of the FDP: Participants gained:

- Hands-on experience with tools in cybersecurity and digital forensics.
- Insights into emerging research areas in cyber forensics, including ethical hacking practices.
- Job-ready skills discussed by industry experts, emphasizing practical knowledge for teaching and professional applications in cybersecurity.

Resource Persons: The FDP was conducted by a team of experts, including:

- **Prof. D. Lalitha Bhaskari** (Andhra University)
- **Prof. P. V. Lakshmi** (GITAM University)
- **Dr. N. Rukma Rekha** (University of Hyderabad)
- **Bhushana Samyuel Neelam** (AlphaAppleton Innovations)
- **Prof. V. Naga Lakshmi** (GITAM University)
- **Prof. I.S. Pallavi** (GVPCDPGC(A))
- **Prof. Prapoorna Roja** (GVPCOE)

Registration and Participation:

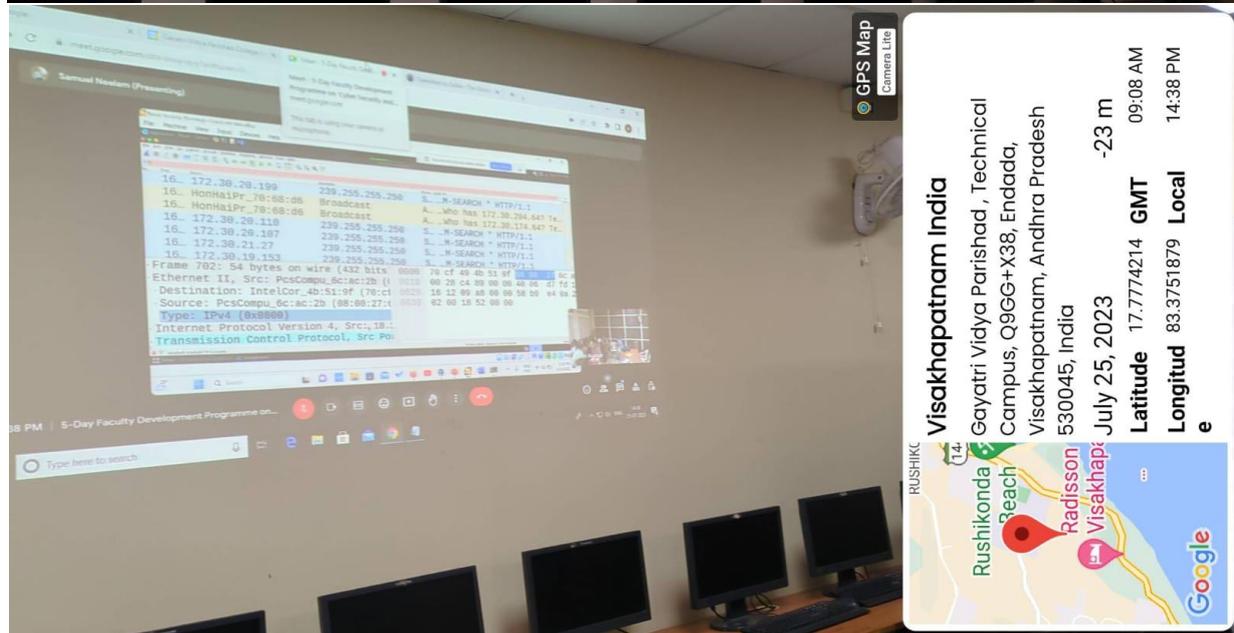
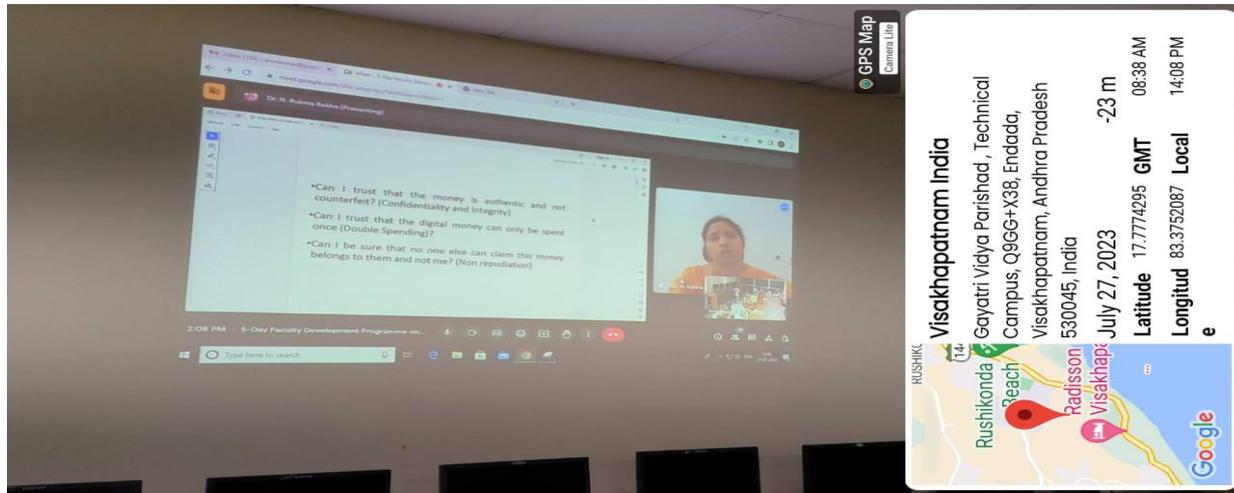
The FDP was open to teachers from various institutions and industry professionals working in cybersecurity-related fields, with a registration fee of INR 1000 for faculty and scholars, and INR 2000 for industry participants. The program attracted educators seeking to update their curriculum with cybersecurity knowledge and practitioners aiming to deepen their expertise.



Prof. D. Lalitha Bhaskari, giving insights regarding security and threats



Prof. P.V. Lakshmi explaining about cyber security and cyber forensics



Dr. N. Rukma Rekha discussing about Role of Block Chain in Cyber security



GPS Map
Camera Lite

Visakhapatnam India
 Gayatri Vidya Parishad , Technical
 Campus, Q9GG+X38, Endada,
 Visakhapatnam, Andhra Pradesh
 530045, India
 July 25, 2023
 Latitude 17.7773402 GMT 05:29 AM
 Longitude 83.3751388 Local 10:59 AM
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GPS Map
Camera Lite

Visakhapatnam India
 Gayatri Vidya Parishad , Technical
 Campus, Q9GG+X38, Endada,
 Visakhapatnam, Andhra Pradesh
 530045, India
 July 25, 2023
 Latitude 17.7773402 GMT 05:36 AM
 Longitude 83.3751388 Local 11:06 AM
 e



Bhushana Samyuel Neelam from AlphaAppleton Innovations discussed about Foot printing & Reconnaissance Network scanning Enumeration and gave Hands-on experience with tools in cybersecurity and digital forensics

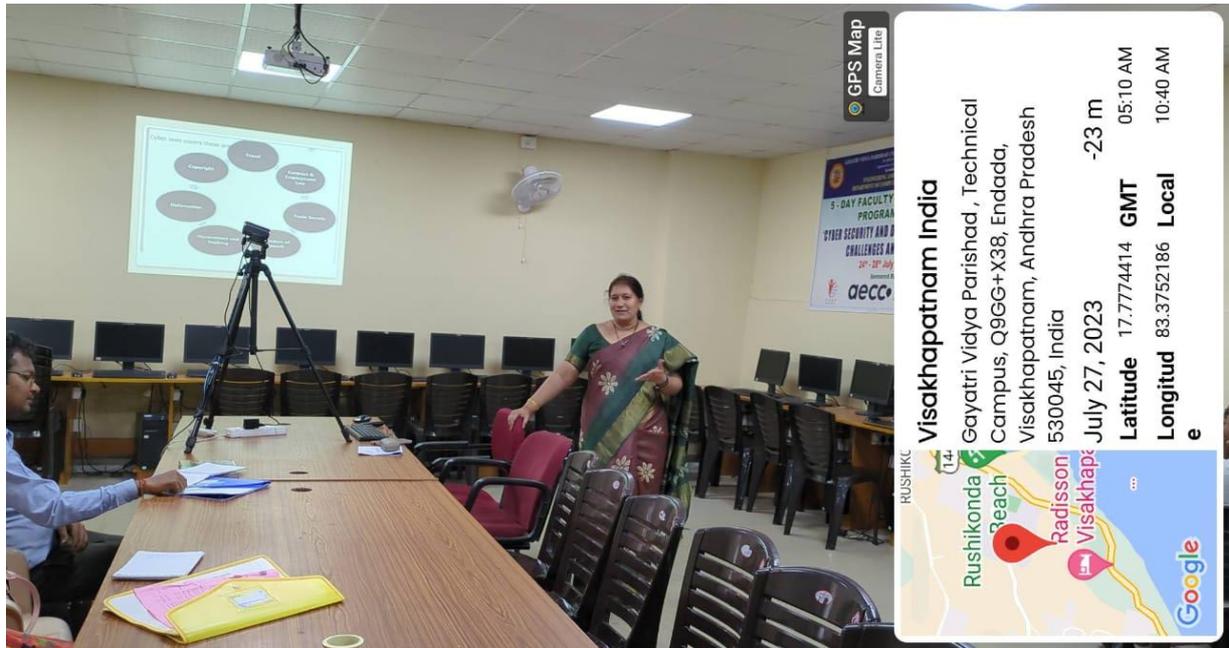


GPS Map
Camera Lite

Visakhapatnam India
 Gayatri Vidya Parishad , Technical
 Campus, Q9GG+X38, Endada,
 Visakhapatnam, Andhra Pradesh
 530045, India
 July 26, 2023
 Latitude 17.7773689 GMT 05:06 AM
 Longitude 83.3751565 Local 10:36 AM
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Prof. V. Naga Lakshmi (GITAM University) gave insights on security Cross chain transactions in block chain and attack detection



Prof. I. S. Pallavi explained about cyber threats, ethics and laws

Conclusion:

The *Faculty Development Programme on Cyber Security and Digital Forensics* effectively provided participants with crucial insights and hands-on experience in cybersecurity, addressing real-world challenges and preparing them to impart practical, industry-aligned cybersecurity education. The success of the program reflects the increasing demand for knowledge in cybersecurity and the commitment of Gayatri Vidya Parishad College to advancing professional development in this essential field.



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ENGINEERING AND TECHNOLOGY PROGRAM

CERTIFICATE OF PARTICIPATION

This is to certify that Mr./Mrs. _____
of _____ participated and successfully
completed five-day faculty development program on "Cyber Security and
Digital Forensic: Trends and Challenges" from 24-07-2023 to 28-07-2023
at Gayatri Vidya Parishad College for Degree and P.G. Courses(A),
Rushikonda, Visakhapatnam.

Prof.S.Rajani
Principal

Dr.B.V.Ramana Murty
Director

Dr.N.V.Ramana Murty
HOD-CSE

Dr.D.Chandravathi
Convener

Signature of Convener

Signature of the HOD