



REPORT

Cyber Security

16th to 20th September, 2019



Central University of Jharkhand
Ranchi

AICTE TRAINING AND LEARNING ACADEMY, GUWAHATI



CYBER SECURITY WORKSHOP

Cyber Security 5-Days AICTE sponsored workshop was conducted by All India Council of Technical Education and Central University of Jharkhand (CUJ), Brambe, Ranchi organized by Department of Computer Science and Technology (DCST) under the school of Natural Sciences of CUJ dated from 16th September 2019 to 20th September 2019 full day in which around 70 participants across Jharkhand, Bihar, Uttar Pradesh, Pondicherry, Tezpur, West Bengal participated for the same.

Number of Participants: 70

Website: <http://sites.google.com/view/atal-cs-workshop>

The eminent speakers / resource persons of this 5-days workshop on “CYBER SECURITY” were:

Mr. Rakshit Tandon, Consultant & Cyber expert of the Internet and Mobile Association of India



A meritorious student of St. Peter's college Agra. He has completed his Master's in Computer Science from Delhi. He is an Ethical Hacker, Certified by the EC Council, Microsoft Certified Professional by Microsoft, and Certified Computer Forensics Expert from Brain bench USA. **Mr. Rakshit Tandon** has created a revolution in the field of cyber security. He has gone one step up and besides touching just keyboards and wires all the time he has touched lives of lakhs of people.

Dr. S. C. Yadav Head, Ass. Professor, Department of Computer Science and Technology, CUJ ,Jharkhand



Dr. Subhash Chandra Yadav is currently Associate Professor and Head, DCST, CUJ, Ranchi, He Doctor of Philosophy along with five master's degree MSc, MCA, MPhil, M Tech and MBA. He has more than 21 years of experience in software industry and in academia. He, has successfully completed several govt. projects and attended several National and International Workshop/Seminars/ conferences. His research interest includes Network Security, Computer Database, Cloud computing and soft computing. Till date, he has three books , five international and more than thirty national journals/conferences papers in his credit.

Prof. Dilip kumar Yadav, Professor, Department of Computer Application, NIT Jamshedpur



He completed his Ph.D. (Software Reliability) from IIT Kharagpur. He currently works as Professor and Head, Department of Computer Applications, National Institute of Technology, Jamshedpur. He does research in Industrial Engineering, Manufacturing Engineering and Computer Engineering. Their current project is 'Software Quality and Reliability Modelling '.

Mr. KUMAR SAURABH, Technical Officer, Cyber Crime Police Station , (CID) Ranchi



Mr. Kumar Saurabh working as Technical Officer at Cyber Crime Police Station CID, Jharkhand and worked as ISO , IPR consultants in various industries and government firm. He has completed his masters from NLU Bhopal with an exposure to information security standards (ISO: 27001, HIPPA, SOX, GLBA) and implementing the policy and procedure. He has executed various academic projects such as Cloud Computing Security & its implementation, Big Data, Data mining techniques & its issues, penetration testing, implementation of ISMS policies. He has strong communication, collaboration & interpersonal skills with proficiency in grasping new technical concept quickly and utilizing them in an effective manner. He has the ability in handling multiple priorities with a bias for action and a genuine interest in personal and professional development. He is a founder and contributor for EASE CERTIFICATION SERVICES, Member of Cyber peace Foundation, Nation Hacking Group.

Mr. Sachin Gupta, Director- Cyber Zone Technologies, Advisor- Cyber Crime Unit , U.P. Police, Lucknow



Mr. Sachin Gupta is an Advisor/Cyber Crime Expert to Cyber Crime Unit of Uttar Pradesh Police at Lucknow and Visiting Faculty-Lecturer at DR. B.R. Ambedkar Police Academy – Moradabad (U.P) and Uttar Pradesh Police Computer Center, Lucknow. He regularly conducts Training Programs on Cyber Crime Investigation for Police Departments across the nation, to name some are Police Range at Lucknow, Lucknow STF (Special Task Force), Aligarh, Greater Noida/ Varanasi STF (Uttar Pradesh) Uttar Police Training College, Daroh Himchal Pradesh, ITBP Eastern Frontier.

Mrs. Ragini, Assistant Professor, Department of Computer Science and Technology, CUJ Jharkhand



Mrs. Ragini obtained MS in Cyber Law and Information security from IIIT Allahabad. She qualified DST KIRAN IPR for two consecutive batches as 8th and 9th. She has been teaching Cloud Computing Security & its implementation, Big Data, Data mining techniques & its issues, penetration testing, implementation of ISMS policies, Risk Management, Cyber security, Cryptography, IT ACT. Her research interests are Steganography, mobile computing and cloud computing. She has an exposure of VAPT, SOX, ISMS, Risk analysis, CVSS, firewall. She has the ability in handling multiple priorities with a bias for action and a genuine interest in personal and professional development.

Mr. Amritansh Vats , Advocate at Jharkhand High Court Ranchi, Jharkhand



Mr. Amritansh Vats is an experienced Advocate with a demonstrated history of working in the legal services industry. He is Skilled in matters related to Constitution, Service Law, Appointment Matters, Labour Laws, Land Acquisition Law and Criminal Law. He is also appointed as Amicus Curiae by High Court in several matters related to Environment and Criminal Law. He is visiting professor of Law in Universities.

Mr. Shivendra Kumar, Cyber Forensic Consultant, CID, Ranchi



Mr. Shivendra Kumar is currently working with CID Ranchi as a Junior Cyber Forensics Consultant. He has more than 6 years of experience in digital forensic. His expertise area are cyber forensics, FTK, Encase, Mobile forensic. He handle many live cases of Jharkhand under CID and takes classes and provides training on cyber forensics.

Mr. Sumit Prasad, Dy. SP (Cyber Thana), CID Ranchi



Mr. Sumit Prasad is presently working as a Deputy Superintendent of Police in CID Ranchi. He is expertise in Cybercrime related issues. He is skilled in cyber cases, digital forensics, SIM cloning, ATM fraud, SIM BOX, IT ACT. Cyber Suraksha is under his guidance and various videos are being uploaded by him for common people to avoid the cyber fraud which are being done every day by cyber criminals.

ATAL workshop on Cyber Security at Central University of Jharkhand Inaugural Session

The Day-1 workshop started with a wonderful inaugural ceremony where distinguished personalities were present across the country. The event was inaugurated by Mr. Anurag Gupta (IPS, ADGP, CID, Ranchi), Prof. A.K Nayak (President, CSI), Mr. Rakshit Tandon (Cyber Expert, Consultant – IAMAI), Prof. Nand Kumar Yadav 'Indu' (VC, CUJ), Prof. Sarang Medhekar (Chairman, ATAL-CS Workshop) and Dr. Subhash Chandra Yadav (Head, Department of Computer Science and Technology). The ADGP of Jharkhand Police (CID) Mr. Anurag Gupta advised the youth to be aware of the law related to cyber crime, citing several instances related to cybercrime. Prof. A.K Nayak, president of the Computer Society of India, presented a detailed introduction to the participants about the evolution of computer technology and emerging cyber crime. He said that this is the era of information and technology, which has its own challenges, but we have to turn it into opportunity. He appealed the youth to take care of all aspects related to cyber security and can shape their future in this domain. Prof. Nand Kumar Yadav 'Indu' gave an information about how today's youth are becoming victims of unintentional cybercrime. He focused the participants to be aware of different technology and crimes related to cyber. He suggested the youth to be vigilant in this direction and make yourself and society aware of this cyber security.



ATAL workshop on Cyber Security at Central University of Jharkhand DAY 1

The **first session** of the workshop was delivered by **Mr. Rakshit Tandon**, consultant and cyber expert of the Internet and Mobile Association of India. He explained how cyberspace security has become the biggest challenge in this era of information and technology. There is a complete lack of awareness among people about various technologies related to cybercrime and this is the main reason they are becoming victims of cybercrime. He called upon the youth to avoid being a victim of unintentional cybercrime. He explained how most of the victims are youth and women. He gave some practical exposure about cloud security, password management, and e- wallet safety. He gave some important information about different android applications which are using our personal data's. A practical session was conducted showing our data are unsecure and what to be done to make them secure.

The participants were given a detailed introduction to Cyber security, Cybercrimes like stalking, phishing, pornography, cyber terrorism; e-mail spoofing and the sessions were mainly hands on with useful examples.



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The **2nd session** on Day-1 was handled by **Dr. S. C. Yadav** Head DCST, CUJ, the sessions were mainly based on Cyber Security Concept, Cyber space and awareness. The sessions combined theory as well as Practical approach towards cyber security relating penetration testing, Linux programming and cyber laws.



DAY 2

The Day-2 **sessions 3 and session 4** which was taken by **Prof. Dilip Kumar Yadav**, Department of Computer Applications, NIT, Jamshedpur was mainly on Infrastructure and Network Security which includes theoretical as well as practical session for the participants. Professor Yadav has explained how easily it is possible to steal private data through email fraud. A live practical session was given by him to the participants on sending a false email and explained how every image that comes to you may not be of a real person. The session includes the fact that opening an e-mail without identification can prove dangerous for you. All platforms, whether mobile phones or desktop computers, download attachments in email, all your personal data can be accessed from a remote device. In one of his sessions, he suggested to the common people that if any virus or malicious software comes in your system from an email attachment, it will first corrupt the data on your <C> drive. So if possible, store private data by creating a separate drive.

The session was more theoretical with involving participants with ideas and the class was mainly based on the future of Network security as the backbone of cyber security.



ATAL workshop on Cyber Security at Central University of Jharkhand

The 5th session on Day-2 was handled by **Mr. Kumar Saurabh**, Technical Officer, Cyber Thana , CID, Ranchi, the sessions were mainly based on Types of Cybercrime, certifications related to cyber security professionals, basic tools for cyber security and IT ACT. He stated his session on how he come up with cybercriminals in daily basis were maximum of the cases register were crime via unintended providing the attacker with our personal information. He made us aware how by just clicking on an unknown link we can make our account empty. During the session, Participants were being aware of the regions of Jharkhand where cybercrime has become common and most of the cyber criminals has been found during his job were teen or youth and of average age category that was affected were 35 and above. He gave technical knowledge of how police make use of various method to get track of the criminal and different real time cases were discussed. The sessions combined theory as well as hands on for the above mentioned topics.



DAY 3

The Day-3 **session 6 and session 7** was handled by **Mr. Sachin Gupta**, Director of Cyber Zone Technology and Advisor of UP Police, Lucknow, Cybercrime Unit . The main focus of the session was bug hunting. Mr. Sachin Gupta encouraged the participants in his session to make a career through bug hunting. He told how students can easily earn thousands of dollars during their education by taking out the loop holes i.e. bug in the websites of big companies. Information on various tools and websites related to bug hunting was shared by him followed by a live hand on experience on bug hunting. According to him even a normal student can practice for 2 to 3 hours a day to increase their efficiency in bug hunting. Both the sessions were based on Vulnerability analysis, penetration testing, Bug hunting, introduction to tools and websites for practicing bug hunting and VAPT. The sessions were theoretical as well as hands on which was useful to the participants.



The **8th session** on Day-3 was handled by **Mrs. Ragini**, Assistant Professor, Department of Computer Science and Technology, CUJ, Jharkhand. The sessions was based on Security in evolving technology, security issues, policy, and cryptography and steganography role in cyber security. The session was focused on CIA triad of security and attacks .Various certified course like SSCP, CEH, CCNA Security, CISSP and many more were discussed. The session includes theoretical as well as practical session on various tools as Blue vector (Enabling machines to protect themselves with the help of AI and deep learning), BRICATA (it adds threat hunting to traditional IPS/IDS) Cloud Defender (Protecting clouds with cloud defender from Alert logic), kali Linux, Wireshark, Nessus etc. Participants were made familiar with different steganography tool for research activity.

DAY 4

The Day-4 **session 9th** was taken by **Mr. Amritansh Vats**, Advocate of high court, Ranchi and the session was focused on Cyber Law, IT ACT, and Cyber Forensics. He introduced the participants on various sections of IT ACT, IPC and BBE ACT. The session was deal as a live scenario of a cyber-case and its process from FIR to filling the case in Court. The session was informative to the participants as he explained how IT ACT and law was formulated before its formulation. Session included some case study were he explained how majority of the cases belong to fraud or fake profiling of a women on social media which is not only the part of cyber law but it also comes under various criminal laws. The session made the participants learn and understand the real time use of the above topics.



The **10th and 11th session** on Day-4 was handled by **Mr. Shivendra Kumar**, Cyber Forensic Consultant, CID. The session was mainly on Cyber Forensics. He introduced the participants with hand on experience in his daily venture. He explained how a cyber-forensic consultant can serve the society and carry on their duty with 100% accuracy as they have to present the evidence via electronic media without distorting the original one. A forensic expert have to copy the original data by a read only form without writing on the original CD or hard disk by using write block. We were made aware what all situations occur during a RAID case and duties of forensic

ATAL workshop on Cyber Security at Central University of Jharkhand

expert on that situation. The sessions were helpful and effective to the participants in theoretical as well as practical exposure.



ATAL workshop on Cyber Security at Central University of Jharkhand DAY-5

The Day 5 sessions 12th and session 13th was to introduce the participants with real time exposure to cybercrimes and its working environment. The Participants were made to visit cyber thane / cyber cell CID under the supervision of **Mr. Sumit Prasad** Deputy SP, CID Ranchi with his team. A real life example was given by his team who explained how a cybercrime was being done by an Nigerian man were he use to use multiple SIM and IP address which was difficult to track. He explained how a cyber-criminal trap their victims on various branded product and promise to send to him , were after many calls were received by the victim that his product were given without a custom duty , and now he will be behind the bars, trapped under this circle the man loose his money. They used a strategy were they tracked his last recharge and from this the got the link of the attacker. Similar cases and examples were given and shown some forensic tools as FTK and others. The participants learnt about the Cyber forensics, SIM cloning, Cyber suraksha, ATM Frauds, Fake Phone calls by CID Ranchi, all these helped them to understand the real time use of the above topics.



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The 14th session on Day-5 was followed by last session for the workshop which was delivered by Dr. SC Yadav, Associate Professor, Head DCST, and CUJ on Cyber space issues and challenges. The Participants were shown the various index of 2018 worldwide on cybercrime, South Asian region and where we are living our livelihood includes 36% of Internet penetration. The participants were given a detailed description of various IT law and how to approach when a crime is been done. At last the participants were made to be aware about the five pillars of cyber security mainly Education and awareness, Planning and preparation, Detection and recovery, Sharing and collaboration , finally Ethics and collaboration.

The session was more theoretical with involving participants with ideas and the class was mainly based on the Cyber Space and its connection with IOT, Soft computing, Data analysis and mining. The session was then followed by an Examination of the Participants.

Valedictory Session

A warm welcome was made by Mr. Sumant Pushp Assistant Professor, DCST, CUJ to the guest and participants in valedictory session. The valedictory function was chaired by eminent gynecologist Dr. Roma Yadav, Prof. Nand Kumar Yadav 'Indu', VC , Central University of Jharkhand, Dr. Subhash Chandra Yadav, Head of the Department of Computer Science and Technology, Prof S. L. Hari Kumar, Registrar CUJ, Mr. Narendra Kumar, Public Relation Officer , CUJ.

Dr. Roma Yadav has congratulated the convener of the workshop "Dr Subhash Chandra Yadav" for organizing such an event on cyber threat, she said "millions of people around the world are using the computer and internet every day, it has brought so many benefits to the society but it has also brought some problems like cyber security. She said, now it's time to make aware our youth and students about these social disease and national security threat. She has also suggested that Cybercrime is a growing concern throughout the world, thus, research must continue to take place in order to keep cyber space as safe as possible and protected from the actions committed by the cybercriminals.

Hon'able Vice Chancellor of CUJ has addressed the participants with a thought that knowledge is the key power with the help of which you can conquer the world. To help or destroy any one you need not need a weapon just be a CYBER EXPERT. He has encouraged all the participants to develop their expertise in the field of cyber security and revealed that it will be a greatest service to the nation.

The guests for the event felicitated the members of the workshop for their hard work and congratulate all for a successfully completion of the 5 days' workshop on Cyber security.

Mrs. Ragini, Assistant Professor, DCST, CUJ, Jharkhand expressed the vote of thanks to all the guest and participants who have given their time and patience in learning and understanding the gist of cyber security and its need in social awareness and was ended with a weeklong knowledgeable sessions.

At the end of the session "feedback" session on the feedback form provided by AICTE- Training And Learning (ATAL) Academy Workshop: <https://form.gle/mu1qjTcdD6hCo7oK8>

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The certificate distribution was held during the valedictory function.




ATAL workshop on Cyber Security at Central University of Jharkhand

The workshop was a success as all the participants were successfully able to understand the awareness related to cyber security, hacking, ethical hacking, VAPT, IT ACT, tools and software applications deliverables at the end of the workshop. The response from the participants about the workshop is tremendously good and positive and as per the feedbacks they would want to attend such more hands-on workshops further in future.

Program Schedule



Five Day Workshop on Cyber Security
(Under ATAL Academic Program – Sponsored by AICTE)
(16th to 20th September 2019)



Program Schedule						
Dates	10:00 AM to 11:30 AM	11:30 AM to 12:00 PM	12:00 PM to 1:30 PM	1:30 PM to 2:30 PM	2:30 PM to 4:00 PM	4:15 PM to 4:45 PM
16-09-2019	Registration and Inauguration Mr. Anurag Gupta IPS, ADGP(CID,HQ) Additional director General of Police, Doranda, Ranchi	High Tea	Session 1 Cyber Security Concept (A Brief and Awareness Session) Mr. Rakshit Tandon Consultant – IAMAI (Internet & Mobile Association of India)	Lunch	Session 2 (A Brief and Awareness)and Hand on Experience Mr. Rakshit Tandon Consultant – IAMAI (Internet & Mobile Association of India)	Tea
17-09-2019	Session 3 Infrastructure and Network Security Prof. Dilip kumar Yadav Professor, Department of Computer Application, NIT Jamshedpur	Tea	Session 4 Infrastructure and Network Security Prof. Dilip kumar Yadav Professor, Department of Computer Application, NIT Jamshedpur	Lunch	Session 5 Lab Activity Mr. Saurabh Technical Officer, CID Ranchi	Tea
18-09-2019	Session 6 Bug Mounting Mr. Sachin Gupta Advisor- Cyber Crime Unit, Director- Cyber Zone Technologies U.P. Police, Lucknow	Tea	Session 7 Bug Mounting Mr. Sachin Gupta Advisor- Cyber Crime Unit, Director- Cyber Zone Technologies U.P. Police, Lucknow	Lunch	Session 8 Security Issues, Tools and Policy Mrs. Ragini Assistant Professor, Department of Computer Science and Technology, CUJ, Jharkhand	Tea
19-09-2019	Session 9 Cyber Law and Forensics Mr. Amritansh Vats Advocate at Jharkhand High Court Ranchi, Jharkhand, India	Tea	Session 10 Hand on Experience Mr. Shivendra Kumar Cyber Forensic Consultant CID Ranchi	Lunch	Session 11 Hand on Experience Mr. Shivendra Kumar Cyber Forensic Consultant CID Ranchi	Tea
20-09-2019	Session 12 Cyber Cell/Cyber Thana Visit Ranchi Mr. Sumit Prasad Dy. SP (Cyber) CID Ranchi	Tea	Session 13 Cyber Cell/Cyber Thana Visit Ranchi Mr. Sumit Prasad Dy. SP (Cyber) CID Ranchi	Lunch	Session 14 Cyber Space Issues and Challenges Dr. S. C. Yadav Head, Associate Professor DCST, CUJ	Valediction VC(CUJ), Head DCST

Department of Computer Science and Technology, Central University of Jharkhand, Ranchi
Website: <http://sites.google.com/view/atal-cs-workshop> Email: atalcsworkshopcu2019@gmail.com



जागरूकता स घटगा साइबर अपराध पर युवा और महिलाएं सतर्कता बरतें

सिटी रिपोर्टर, रांची

सेंट्रल यूनिवर्सिटी, झारखंड में साइबर सुरक्षा पर कार्यशाला हुई। इसमें साइबर विशेषज्ञों ने बताया कि देश में हर 10 मिनट में एक साइबर अपराध हो रहा है। इसके सर्वाधिक शिकार युवा और महिलाएं हो रहे हैं। कुलपति प्रो डंडु ने कहा कि इसका प्रमुख कारण युवाओं में जागरूकता का अभाव है। साइबर विशेषज्ञ रजित टंडन ने कहा कि सूचना एवं तकनीक के दौर में साइबर स्पेस की सुरक्षा सबसे बड़ी चुनौती है। इससे जुड़ी तकनीकों को लेकर लोगों में जागरूकता का अभाव है। इस



चुनौतियों को अवसर में बदलें : नायक

झारखंड पुलिस के एडीजी (सीआईडी) अनुराग गुप्ता ने साइबर अपराध से जुड़े कई उदाहरणों का हवाला देते हुए युवाओं को इससे जुड़े कानून को लेकर जागरूक होने की सलाह दी। कंप्यूटर सोसाइटी ऑफ इंडिया के अध्यक्ष एके नायक ने कहा कि यह सूचना एवं प्रौद्योगिकी का दौर है, जिसकी अपनी अपनी चुनौतियां हैं।



केंद्रीय विश्वविद्यालय में जुटे देशभर के साइबर सुरक्षा विशेषज्ञ —

देश में हर दस मिनट में एक साइबर अपराध ब्राम्बे। केंद्रीय विश्वविद्यालय, झारखंड में साइबर सुरक्षा पर आधारित कार्यशाला में साइबर विशेषज्ञों ने बताया कि देश में हर दस मिनट में एक साइबर अपराध हो

सीयूजे में साइबर अपराध के प्रति जागरूक किया

कार्यशाला

रांची, संवाददाता

केंद्रीय विश्वविद्यालय झारखंड में साइबर सुरक्षा पर कार्यशाला का उद्घाटन किया गया। कार्यक्रम का उद्घाटन कुलपति प्रो डंडु कुमार खन्ना 'हुंदू' और एडीजी (सीआईडी) अनुराग गुप्ता ने किया। कुलपति ने कहा कि आज के युवा ज्ञान-अनुभव साइबर अपराध के शिकार हो रहे हैं। इसका मुक्त कदम



केंद्रीय विश्वविद्यालय में साइबर की अवगत कार्यक्रम का उद्घाटन करने अतिथिगण। • कुलपति रजित टंडन (दोसरे से) साइबर सोसाइटी ऑफ इंडिया के अध्यक्ष एके नायक (बाएं) और एडीजी (सीआईडी) अनुराग गुप्ता (दाएं)।

कार्यशाला केंद्रीय विवि में साइबर सुरक्षा पर कार्यशाला युवाओं को सचेत रहने की जरूरत

सिटी रिपोर्टर, रांची

केंद्रीय विवि, झारखंड में साइबर सुरक्षा पर आधारित कार्यशाला में कुलपति प्रो (डॉ) डंडु कुमार खन्ना ने कहा कि आज के युवा ज्ञान-अनुभव साइबर अपराध के शिकार हो रहे हैं। इसका मुक्त कदम साइबर सुरक्षा को लेकर उचित जागरूकता का



Electronic Media

<https://www.joharlive.com/2019/09/17/cyber-security-workshop-at-cuj/>

<https://www.joharlive.com/2019/09/17/prof-dilip-kumar-yadav-central-university-of-jharkhand-cyber-security-workshop/>

<https://www.joharlive.com/2019/09/18/cyber-security-workshop-2019-central-university-of-jharkhand-sachin-gupta/>