# Jadavpur University: Srijan, <u>Cyber Security</u> <u>Workshop</u>

About Sohang Sengupta -

Founder & Chairman - ZeroDollarSecurity

Sohang Sengupta is the Founder & Chairman of Zero Dollar Security. Being one of the youngest Red hat Certified System Administrators in India, he had the vision to start a company, plan different and make it big at a very young age. He currently exercises as not only the Founder & Chairman for ZeroDollarSecurity, but also as the CEO for Cibertix Technologies LLP, as the Head of Information Security for a booming startup named CemX and the Head and Founder of the Innovation and Entrepreneurship Cell at the Institute of Engineering & Management, Kolkata which is sponsored by DST, the Government of India. Sohang was also selected as one of the top 30 KWHS Young Leaders from around the world by the prestigious University of Pennsylvania's Wharton School of Business. He has previously interned at RSA Security, DELL EMC, Center of Excellence at Bangalore, India and at ITC Infotech in their CyberSecurity Team.

# ABOUT ZeroDollarSecurity

ZeroDollarSecurity is a 'Make in INDIA' initiative and first of our kind Limited Liability Partnership organisation committed to augment the skills of 'Cyber Security' and change the present Charge-Per-Service Model of IT Security Service & Consultancy. We intend on opening Chapters across colleges in India, and to reach out and train the young and talented minds and bring them under one umbrella - ZeroDollar Security - A place where we 'Educate' and 'Procreate' together as one Community. We have recently launched on a very successful note with an astounding response at National Institute of

Technology, Durgapur. We also have active Chapters running in colleges like Kalinga Institute of Industrial Technology (KIIT)\*, Institute of Engineering & Management, University of Engineering & Management\*, etc. We are also delighted to have Industry Connects from companies like DELL, INTEL, RSA, BlackKnight and PwC.

# WHY ZeroDollarSecurity?

Aimed as a benefactor for Cyber Security Enthusiasts, we bring about a complementary three-month long Community Plan, where one gets to learn and acquire even more out of the workshops. We shall in this period provide the enthusiast with tasks and lessons and a constant connect with their mentors. At the end of three months, we shall decide upon the "Chapter Champions" and hire them for our own, ZeroDollar's Security Team where they get to work on both on and off site projects. ZeroDollar isn't any other training institution, but a learning ground where the opportunities are wide open and set at par. We make you strong both at your, 'network' and your 'net worth' as a Cyber Security professional for tomorrow.

## **CURRICULUM**

- 1. Setting up your Linux environment
- 2. Shell scripting
- 3. Using Linux (File Navigation & Handling)
- 4. System Administration
- 5. Processes & some other important tools
- 6. Networking
- 7. Compression & System configuration
- 8. Permission analysis & methods
- 9. Networking Basics & OSI Model
- 10. Topologies and Connectors
- 11. Network Types, IP/MAC Address and Firewall
- 12. Protocols (TCP/IP/UDP)
- 13. SOHO Routers
- 14. Networking and Security Protocols
- 15. Information Security
- 16. DoS, DDoS
- 17. Basics of Security

- 18. Reconnaissance, Footprinting and Maintaining Anonymity
- 19. The CIA Triad and Network Security
- 20. Social Engineering
- 21. Sniffing
- 22. Phishing Attacks
- 23. VAPT Vulnerability Assessment and Penetration Testing
  - Information Gathering
  - Setting up Burp suite
  - XSS Cross Site Scripting
  - Parameter Handling and Tampering
  - SPF (Senders Policy Framework)
  - Missing SPF Records
  - File Injection
  - Command Injection
  - Host Header Injection
  - HTML Injection
  - URL Redirection
  - Parameter Tampering
  - File Inclusion
  - Insecure CORS Configuration
- 24. Hands on Training & Demonstration

### COMMUNITY PLAN

Members who enroll with us during or after the workshop get a three-month complimentary ZeroDollarSecurity community membership. During this period, a minimum of two classes per month shall be held at the Jadavpur University Campus. The other factor influencing the procedure for conduction of classes shall depend on the number of heads, if <50, we shall conduct classes at our own Facility. If the member count is <100, we shall conduct classes at Jadavpur University itself and also call on board outstanding students from other institutions, to upgrade the learning environment and to build competition. If the head count exceeds 150, the classes will be conducted at Jadavpur University with the Jadavpur University Community members solely. The sync maintained otherwise with the community shall be done through a Community group on a popular social media platform, say Slack or Whatsapp. The materials to be provided and discussions shall be continued on our App and also be mailed to the students regularly.

# HARDWARE AND SOFTWARE NECESSITIES

2GB RAM BaseOS or LiveBoot 4GB / 6GB RAM - Partition OS or LiveBoot 8GB - Virtual Box LiveBoot Partition OS

Processor Requirement - i3 & above Pentiums will also work.