

TRIX-I 2022

Workshop

Proposed Event
The Eye, CSEA

Proposal Document by 21Z202
("Aaditya Rengarajan")

Brief

The "TRIX" Series will be a series of Workshops held biannually, and will be a Workshop event, aiming to bring everyone into the field of Cybersecurity. "TRIX-I" will be held in the latter half of 2022, and will continue as "TRIX-II" and "TRIX-IV" in 2023, and so on.

Aim of the Event

To spread awareness on Cybersecurity, and provide basic training.

Target Audiences

All Students and Faculty in PSG College of Technology. Specifically, AMCS, CSE and ECE Departments.

Duration

3 Sessions lasting 1 hour each, with a 10-minute break in between each session. Preferably hosted post-12PM.

Special Requirements

- Requirement to provide exemption for attendees and organizers (at least members from the CSE Department), in order to motivate participation.
- The event must be held in a computer laboratory or a place with power sources, as attendees will be required to use their personal computers.
- Network Connection should **preferably** (not obligatory) be provided to the audiences.

Details

The Workshop will be split into 4 sessions.

Session 1

10 Minutes :- Opening Keynote delivered by Aaditya

- Introduce Club, Thank HOD and Faculty Advisors
- Share a few words about where we will be by the end of this month, and where we will be by the end of this semester
- Thank the audience for joining in and introduce workshop sessions, topics and speakers.

20 Minutes :- Why Cybersecurity is Important As an Individual [SOORYA]

Blue Whale, Fire Fairy, Salt+Ice Challenge. The science of addiction, Body Dysmorphia Disorder, Alicia Navarro.

10 Minutes :- A Sample Security Incident, and SOC's [SOORYA]

Uber and Rockstar Hack

10 Minutes :- IT Laws [SOORYA]

IT Act Section 43,44,45,65,66,67,68,69,70.

Complaint Procedure – cybercrime.gov.in and Cyber Cells in India.

10 Minutes :- Q&A Session + Break [SOORYA]

Session 2

20 Minutes :- CPS/IoT/SCADA and a live attack on a simulated system [AADITYA]

Hands-On Session. Aaditya monitors Petrochemical Plant Pressure Gauge Levels (shown on screen) whilst Soorya assists volunteer hacks into CPS and overloads pressure.

Talk about how Bhopal Gas Accident could've been a cyber-attack.

Talk about Ukraine Power Grids.

10 Minutes :- XSS Attacks and a live sample XSS Attack [DHANUSH]

Hands-On Session. Use one endpoint of our server to steal cookies from another endpoint.

10 Minutes :- the Wireshark Tool [AADITYA]

Hands-On Session. Steal own password from self-hosted server which supports HTTP and HTTPS. Explain difference using Wireshark.

10 Minutes :- Viruses and Ransomware, A Ransomware Case Study
[DHANUSH]

What are Viruses, Worms, Ransomware, etc. Eternal Blue giving birth to EternalRocks and WannaCry Case Study.

10 Minutes :- Q&A Session [DHANUSH ASSISTED BY AADITYA]

Session 3

Session 3 will introduce the audiences to Dark Web and Dark Web Monitoring. It will also give a brief on Networking Models and Topography, and the security aspect in networks. It will also demonstrate some social engineering.

5 Minutes :- Proxy [AADHITHYASHRI]

Try accessing ThePirateBay using normal internet vs using proxy.

10 Minutes :- Dark Web and TOR [AADHITHYASHRI]

Hands-On. Install Brave Browser to access WikiLeaks using TOR, and talk about piracy of content.

5 Minutes :- Dark Web Monitoring [DHANUSH]

Explain Dark Web Monitoring in brief.

10 Minutes :- OSI Model and TCP/IP Model [AADHITHYASHRI]

Explain the 7 layers of OSI Model, as well as the layers of TCP/IP Model. Interactive Session.

10 Minutes :- NMap [AADHITHYASHRI]

Hands-On Session. Use NMap.online tool to explain what NMap is and its functions.

10 Minutes :- ZPhisher and Phishing Attacks with sample live attack
[DHANUSH]

Phish volunteers for passwords. Also explain IDN Homograph attacks and how IDN Homographs can be used in combination with phishing.

10 Minutes :- Q&A Session

10 Minutes :- Closing Keynote delivered by Dhanush

- Assign homework for audience relevant to session learnings
- Thank the audience and speakers for being with us
- Thanks for making our first time the best time
- Thank the faculty advisors for assisting organize a great event