Toshendra Kumar Sharma

Founder & CEO
Wegilant Net Solutions Pvt.Ltd.,
Powai, Mumbai 76
Education: M.Tech (CSE) IIT Bombay
Experience in Cyber Security: 5 years
Work Experience: 2 years Part time, 4 year full time
Workshops Delivered: 150+ Workshops on Ethical hacking & Embedded System
(Including 3 IITs, NITs and many reputed Govt. and Private Colleges)

Awards and prizes

- 2 times Junior Scientist Awardee by National Science Congress
- Ist Prize in National Level Robotics Challenge at IIT Bombay in Techfest 2005
- 14 First Prizes, 6 Second Prizes and Many Third prizes in programming & technical contests in many technical festivals in engineering colleges of India

Research and Academic Projects

Ettercap & ARP Poisioning @ IIT Bombay

- The project aimed to make a defense mechanism for ARP poisoning.
- Project uses ARP Cop pluging with slight modification for detecting the IP Change

DNS & DNSSEC, Problems & Solutions Seminar @ IIT Bombay [Presentation]

- Detailed analysis of DNS Protocol
- Practical implementation on Kaminsky Attack using Metasploit
- Vulnerabilities & Problems in DNSSEC
- Replay Attack in DNSSEC

Attacks on Bluetooth Devices @ IIT Bombay [Presentation]

- Detailed analysis Bluetooth protocol
- Practical implementation on Carwhisperer Attack
- Vulnerabilities & Problems in Bluetooth

Privacy locker 1.1 (Firefox Addon)

- The Primary Objective of privacy locker was to lock the privacy contained menus of the mozilla firefox

browser. The Locker can lock the three menus History, Bookmarks and Tools menu with a password.
- Online link of the Addon is https://addons.mozilla.org/en-US/firefox/addon/10637/

Minos: Control Data Attack Prevention Orthogonal to Memory Model

- Microarchitecture for protecting against control data attacks
- A substitute of AS/400 Technology

SQL Injection Vulnerability in pkmotors.com

- Found SQL Injection vulnerabilities in pkmotors.com
- Found SQL Injection in tartanarmy.com

XSS Vulnerability in cartoonnetworks.com, 100bestbuys.com, www.stern.nyu.edu/ etc.

- Found Non persistent XSS
- Found Vulnerabilities in many other websites that can not be mentioned here...

XOM Based Protection against Software tempering

- **Hardware based using eXecute solution for the software temporing**

Cold Boot Attack [Presentation]

- Recovering encryption key of RSA from DRAM using cold boot attack
- Dumping RAM into USB Drive using SYSLINUX
- Side Channel Attack

3D Game Development using Open source Game engine [Download Game Installer]

- This is a First Person Shooting computer 3D game with a Do or Die theme. The game has few Autonomous Enemy BOTs.
- The Game has feeling like Counter Strike with nice environment and theme
- The game was developed using open source technology:

  - Blender: For 3D Modeling
  - Bullet Physics: For Physics
  - Python: For programming

Effectiveness of advertisement frequency on brand preference [Presentation]

- Effect of advertisement frequency on brand selection by consumer
- Effective advertisement frequency value
- Things which may cause the negative effect on advertisement

Dynamic Information Flow Tracking [Presentation]

- Design a method/mechanism to protect programs against attacks by identifying spurious information flow and restricting the usage of spurious information

- Defence against software attacks

Power Analysis Attacks & Counter Measures [Presentation]

- Analysis of Power Analysis Attacks (Side Channel Attck)
- Countermeasures against power analysis attack

Scan Based Side Channel Attack on AES [Presentation]

- Use of Scan Chain for attacking AES
- Recovering Round key using JTAG interface

Development of MATLAB Based Ball tracker Robot [Youtube Link]

- The Primary Objective of the robot was to follow the ball while using USB web camera for taking continuous images of the arena.
- The ball was searched using MATLAB image acquisition and processing tooll boxes. These boxes helped in acquiring and processing the image for detecting ball.
- Algorithm was to search for Hue, Saturation and Value rather than searching Red, Green and Blue after enhancing the image for better result.

Used Tools and Softwares (for exploiting vulnerabilities in the software, network (LAN/Internet) or Applications)

- Metasploit
- Ettercap
- Nmap, Zenmap
- Armitage
- Nessus
- Cybergate
- BackTrack 5 R1
- Social Engineering toolkit
- Honeypot
- Bluesnarf

- Maltego
- SQL Injectors
- Tor Project
- VPNs
- DVWA
- Wireshark
- Crazycall
- Smsglobal
- Etc.

Business Startups

- ***Robosapiens Technologies Pvt. Ltd., Noida***
- ***Wegilant Net Solutions Pvt. Ltd., Mumbai***
- ***iSecLABz, Noida***
- ***Bootcamps, Mumbai***

Publications

- *Author of the book "Robotics with AVR" published under Robosapiens India Publications*

  - [RSI Publication website](#)
  - For virtual copy of the book : [Click Here](#)
  - More than 2000 copies of the book have already been sold.

- *Writing another manuscript on Ethical Hacking under name Art of Hacking*

Interest

Fixed Interest:

- Hacking
- Robotics
- Entrepreneurship
- Programming
- Theatre & Dramatics
- Playing Flute
- Watching Sci-Fi, Fantasy & Action Movies
- Accepting challenges specially when it comes to computer

Variable Interest: (Can Change over time)

- Swimming
- Sketching

Contact Details

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Social & Professional Network

Social Networks: [Facebook](#), [Twitter](#), MySpace, [Orkut](#), [Google+](#)
Professional Network: [LinkedIn](#)
Youtube: [My Youtube Channel](#)