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Nishit Majithia

EDUCATION

2015–Current M.Tech Computer Science & Engineering, IIT Kanpur.

CPI - 7.71/10 after 2 semester

2010–2014 B.Tech Computer Science & Engineering, Charusat University, Gujarat.

CPI - 8.73/10

2010 Class XII(Science), Shree Satya Sai School, Jamnagar.

Major - 88.3%

Overall - 78.20%

2008 Class X, Shree Satya Sai School, Jamnagar.

Overall - 90.77%

INTERNSHIP

June-August SAMSUNG Research & Development Institute, Delhi, (Team of Two).

2016 Implemented Client Honeypot and Honeypot Server under Security Team SRI-Delhi.

Presented a idea of modifying Client Honeypot to integrate it with Tizen TV Kernel, in order to create a sandboxed environment for browser. That is useful for browser to classify a particular website as malicious or benign.

The Client Honeypot was capable enough of identifying malwares that tries to access or modify file system or process tree of underlying operating system.

The Server Honeypot could successfully able to log all the activities of attacker, logged on to virtual ssh port.

January–May Charusat Space Technology Center (Collaborated with ISRO), Ahmedabad, (team of two).

2014 Guide: Dr. S.P.Kosta (Former Group Director ISRO-Banglore, Chief Scientist at CSTC)

Implemented a payload called "Wireless Sensor Network" for **IMS1A** satellite. Configured and programmed a ZigBee devices for communicating with all sensors available in satellite wirelessly to transfer control signals received from earth.

PROJECTS

January-April Finding the Security Flaws in Zoobar Web Server, Classroom Project, Individual.

2016 Guide: Dr.Sandeep Shukla

This project aimed for finding the security flaws in Zoobar webserver developed by MIT and STANFORD for academics.

Security areas explored: BufferOver-flow attacks, CSRF and XSS, Sql Injection, Code Penetration, Bugs in privileges separation, Code verification using Symbolic Execution etc.

July- Intrusion Detection System, Classroom Project, Team of Two.

November Guide: Dr.Sandeep Shukla

In this project we have implemented IDS such that user's command pattern will be matched with original user's pattern using graph matching technique and find out if the user is intruder or not.

January-April WiFi Analyzer for TIZEN based Products, Classroom Project, Team of Two.

2016 Guide: Mr. Nitin Jhanwar (Samsung)

Created a service daemon for TIZEN TV that analyses the WiFi Access Points, connect to one specified & transfer the file to a Host via Connected AP.

A supplement GUI front end to display the ongoing activities to screen.

January-April Object Detection & Behavioral Learning, Classroom Project, Team of Three.

2016 Guide: Dr. Harish Karnick

Worked on development of the model for object detection (specifically Bicycle detection) using DPM (Discriminatively trained Parts based Model) and over the top of that model, the idea is to understand the behavior of human cycling using Kalman Filters.

July- Skyline Algorithm for Distributed Networks, Classroom Project, Team of Two.

November Guide: Dr.Arnab Bhattacharya

2015 The project involves Skyline Query processing in Distributed Environment. Given a large data set, it is inefficient to process all data items sequentially one by one. Therefore we propose a simple method to perform the Skyline query on large data sets using distributed systems.

RESEARCH

January M.Tech Thesis.

2016–Current Working with **Dr.Sandeep Shukla** to build an intelligent research **Honeypot for IIT Kanpur** Application and Web-hosting servers. Also the major idea is of securing Honeypots in order to make it undetectable

by Advance Attackers.

COMPUTER SKILLS

Familier JavaScript, PHP, MySQL, SHELL, MatLab, Embedded(Arduino) Programming, LATEX

Intermediate Java, Python

Advanced C/C++

POSITION OF RESPONSIBILITY

May 2016 Instructor of "Introduction to C/C++" Course, IIT Kanpur.

Nominated by CSE Dept as one of the two Instructors for the course.

Managed a class of around 40 students with regular assignments, quizzes and lab sessions.

2016–2017 **Coordinator ACA**, *IIT Kanpur*.

One of the two coordinators amongst PG-Y15 batch. Instrumental role in organization of ACA summer School-2016 and Freshers for Y16.

2016–2017 Coordinator INFOSEC(System Security Group), IIT Kanpur.

Organized System Security related lectures, workshops and CTF for IITK junta.

Organized "Crypto" event in Takneek-2016.

ACHIEVEMENTS

2015 AIR 476 in GATE for Computer Science.

2013 University Second Rank in 2^{nd} year B.Tech.

2010 School Merit Scholarship for being in top in X grade.

EXTRA-CURRICULAR

2016 **EasyChair** Reviewer for a paper based on IDS of conference **ICISS 2016**.

2014–2015 More than 10 ZigBee and network related projects on freelancing website.

2014 **EventManager** at National level Techfest Cognizant 2014, CHARUSAT.