Mridul Malpotra

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EDUCATION

Bachelor of Computer Science and Engineering,　　　　August 2012 - August 2016
Indraprastha Institute of Information Technology, New Delhi
Cumulative GPA as of 7th semester: **8.26**

Senior Secondary School,　　　　　　　　　　　　August 2010 - March 2012
Pace Junior Science College - Andheri, Mumbai, Maharashtra
AIEEE Rank: **3322**, 12th Marks: **87.88%**

Secondary School,　　　　　　　　　　　　　　　June 2003 - April 2010
Thakur Public School, Mumbai, Maharashtra
10th Marks: **94.86%**

TECHNOLOGY SKILLS

Expertise Area: Network Security, Networks, Anonymity
Programming Languages: C, Python, C++, Java, Bash shell script
Tools and Technologies: Linux, PlanetLab, Tor, Django, Android, ns3, I2P, Conda, Metasploit, SNMP, RRDTool, MRTG

Technical Electives:

- Server Administration
- Advanced Networks
- Mobile Computing
- Applied Cryptography
- Network Security
- Security Engineering
- Distributed Systems
- GPU Computing

PROJECTS

Subverting Censorship in Anonymous Networks　　　　May 2015 - Present
B.Tech Thesis - *under Dr. Sambuddho Chakravarty, IIIT Delhi*

- Researching alternate ways to hide anonymous network exit traffic (primarily Tor) for specialized services using either anonymous authentication measures and/or hidden services.
- Created private Tor network in PlanetLab of over 170 nodes for testing. Automated deployment, network reconfiguration and node data distribution through a CDN.
- Primary testing on existing Anonymous Authentication schemes (Single Packet Authorization) using a Firewall knock operator on testing Tor network.

SPT Framework for the Internet of Things　　　　　Dec 2014 - May 2015
Independent Study - *under Dr. Hrishikesh B. Acharya, IIIT Delhi*

- Literature survey about Security Privacy and Trust frameworks to incorporate trust in an Internet and Intranet of Things. Major focus on the Georgia Tech Security Privacy and Trust (SPT) Framework, the Georgia Tech Trustmark Framework and Object Naming Service (ONS) concept as a medium for security in IoT.

Non-intrusive Load Monitoring Toolkit   Aug 2014 - Jan 2015

Independent Project - *under Nipun Batra and Dr. Amarjeet Singh, IIIT Delhi*

- Part of development, testing and bug fixing team for the Energy monitoring toolkit.

- Integrated the ECO Dataset Converter (ETH Zurich) by creating a converter and constructing Conda, PyPi recipes for NILMTK and its modules.

- Relevant links: nilmtkmridul.github.io and github.com/nilmtk/nilmtk

Server Administration Group - SNMP Monitoring Toolkit   Jan 2014 - May 2014

under Er. Navpreet Singh, IIT Kanpur and Dr. Vinayak Naik, IIIT Delhi

- Part of a group to study system and network administration in IIIT Delhi.

- Helped in remote monitoring of servers and routers in IIIT Delhi by developing a Server and Router Multiple Interface Bandwidth Monitoring Tool in SNMP with RRDTool on Linux.

- Relevant links: github.com/mridulmalpotra/snmp_monitor

INTERNSHIPS   **CISO CyberSecurity -** *Content Development Intern*   May 2015 - July 2015

under Felix Mohan and Simmi Puri

Helped in data aggregation related to cybersecurity to contribute to content development in educational courses provided by the company.

Rocketperks - *Backend Development Intern*   May 2014 - Aug 2014

under Prathamesh Paiyyer and Anurag Jain

Worked primarily in Back-end web-based application development in Django with Celery automation to develop E-commerce portal extension of company's web application.

AWARDS   **Academic**

- INSPIRE Scholarship (May 12) - Offered a scholarship for being in the Top 1% in State Board exams 2012 if pursuing education in pure sciences. Declined to pursue engineering.

- Thakur Ramnarayan Scholarship (May 10) for coming first in 10th Board examinations in school.

- National Science Olympiad school topper and finalist from Grade 6-8 (07 to 09)

Extra-curricular

- Won Silver in Badminton at Twaran 2k15 Sports Fest (Jan 15), ABV IIITM Gwalior.

- Letter of Recognition in Classical Music & Singing (Jul 13) by eminent Indian Classical singer Dr. Gopa Chakrabarti.

- Trinity Guildhall Certificate (Dec 08) in Grade 2 Piano and Theory of Music with Distinction.

POSITIONS HELD

Academic

- * Student Representative in the Undergraduate Council   May 2015 - Present
- * Secretary and member of Student Senate   May 2015 - Present
- Teaching Assistant for Network Administration   Jan 2015 May 2015
- Teaching Assistant for Basic C Refresher Module   Jan 2015 & Jan 2016
- Teaching Assistant for Advanced C Refresher Module   Jan 2016

Extra-curricular

- * Student Mentor for 1st year students   Aug 2014 - Present
- Google Student Ambassador, IIIT Delhi   Aug 2014 - Jul 2015
- Coordinator - Audio Bytes Music Club, IIIT Delhi   Aug 2013 - May 2014
- ACM Chapter Core Member, IIIT Delhi   Aug 2013 - May 2014

COMMUNITY SERVICE

– New Delhi Rising - *Volunteer*   Jan 2015 - Present
– BloodConnect - *Donor*   Aug 2013 - Present
– Society for Nutrition, Education and Health Action   June 2013 - July 2013
(SNEHA), Mumbai - *Volunteer*

INTERESTS AND HOBBIES

- Playing the piano and drums
- Classical and Fusion Singing
- Badminton

- Puzzle cubing
- Watching movies and anime
- Reading books and manga

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