

EDUCATION

Northeastern University's Khoury College of Computer Sciences, Boston, USA	Sep 2023 – Dec 2025
Enrolled in Graduate Program for Master of Science in Cybersecurity	CGPA – 3.9/4
Key Courses – Cyberspace Technology & Applications, Decision Making in Critical Infrastructure	
DJ Sanghvi College of Engineering, Mumbai, India	Feb 2021 – May 2023
Attained a Bachelor's of Technology in Electronics Engineering with First Class	CGPA – 8.55/10
Key Courses – Python, DSA, Operating Systems, AIML, Cloud Computing, Cybersecurity & Laws	
Shri Bhagubhai Mafatlal Polytechnic, Mumbai, India	Aug 2017 – Oct 2020
Secured a Diploma in Digital Electronics with First Class with Distinction	CGPA – 8.59/10
Key Courses – C++, IoT Networking, Java, Computer Networks, Advances Processors, PC Architecture	

TECHNICAL SKILLS

- Programming Languages - Python, C, C#, Java, SQL | Databases - MySQL, MongoDB
- Development – Eclipse, VS Code | OS Familiarity – Linux, Kali Linux, Ubuntu, Windows
- Other Technologies - Tableau, Wireshark, IoT TwinMaker, Cisco Packet Tracer, Oracle VM VirtualBox, GuruX DLMS, ESP-IDF, Kali Linux, Internet of Things (IoT), AVR Studio, SCILAB, BEEF Framework, Metasploit, Brute Force attack, Hydra, Model Based Risk Analysis (MBRA), Nmap, Snort, Amazon Web Services (AWS) Elastic Cloud Compute (EC2)
- Skills Acquired via Courses – Cybersecurity, Network Security, Security risk assessment, Vulnerability Assessment, Incident Response, INFOSEC, Cryptography, Threat Analysis, Network Defence, Malware Analysis, Cyber Attacks, digital forensics lab, eDiscovery, data collection, extraction, processing, hosting, Forensic Technology

PROFESSIONAL EXPERIENCE

Siemens Energy., Mumbai, India. <u>Vulnerability Assessment Engineer - Cybersecurity</u>	May 2022 – Apr 2023
<ul style="list-style-type: none">• Executed research with Siemens Energy for India, reducing cyber risk by 30%, securing critical infrastructure• Developed AMI smart meter testing framework, bolstering security & reducing vulnerabilities by 25% through qualitative analysis to identify its root cause, performing source code review, & creating reverse engineering solutions• Proficiently decreased infrastructure vulnerability by about 27% through the development of proof-of-concept demos & exploiting buffer overflow vulnerabilities, which shed light upon the capability of tampering with AMI smart meter solution's availability and information integrity.	
NCC Telecom Pvt. Ltd., Mumbai, India. <u>Security Intern – Research & Development</u>	Dec 2019 – May 2020
<ul style="list-style-type: none">• Incorporated new technologies into module line-up, boosting market competitiveness & satisfaction by 20%• Engineered firmware for newer modules, enhancing Android & Web app integration efficiency by 15%• Strengthened module security by 22% via deploying C-based hex files for RSA on the Atmel Atmega Chipset	

ACADEMIC PROJECTS

OpenSSL powered Crypto system project	Jan 2024 – Feb 2024
<ul style="list-style-type: none">• Established secured message exchange for 1 sender & 3 receivers, efficiency increased by 18% & security increased by ~15%	
Mandatory Access Control Deployment in Linux	Jan 2024 – Feb 2024
<ul style="list-style-type: none">• Enforced mandatory access control based on Bell-LaPadula model via SELinux utility in a Fedora server instance and incorporated hardening measures such as restricting access to the web root folder and implementing a sudo transition model to grant limited privileged access to designated administrators.	
Docker Automation Python Project	Nov 2023 – Dec 2023
<ul style="list-style-type: none">• Automated web server deployment, implemented OWASP & other cybersecurity aspects (using utility like Suricata) in docker container, increasing efficiency by 30%	
New England Power System's Risk & Resilience Analysis	Sep 2023 – Dec 2023
<ul style="list-style-type: none">• Applied MBRA for critical infrastructure, optimizing security measures by 25%	
Threat Modeling & Vulnerability Testing in AMI infrastructure	May 2022 – Apr 2023
<ul style="list-style-type: none">• Utilized Wireshark, IoT TwinMaker, threat modeling for security risk assessments reducing risks by 25% through demonstrated ransomware attack leveraging buffer overflow vulnerability	

CERTIFICATIONS

- Introduction to Cybersecurity by Cisco (May 23) | Introduction to Cyber Tools & Cyber Attacks by IBM (Mar 21) | Ethical Hacking from scratch (May 20) | Ethical Hacking (May 20) | CompTIA Security+ (SY-601) (June 23) | Ethical Hacking Essentials (Jul 23) | Information Systems Auditing, Controls & Assurance (Oct 23) | Digital Forensics Essentials (Dec 23) | Network Defense Essential (Dec 23)

PUBLICATIONS

- Bavisi Keval Nitin. (Volume. 7 Issue. 12, December - 2022) "Cybersecurity of Smart Meters.", International Journal of Innovative Science & Research Technology (IJISRT), www.ijisrt.com. ISSN - 2456-2165, PP: - 1223-1227. <https://doi.org/10.5281/zenodo.7511298>