

Pratham Gupta

Brooklyn, New York | 929-461-9230 | pratham.gupta@nyu.edu | Linkedin/PrathamGuptaaa | Github/PrathamGupta

EDUCATION

New York University IIIT Delhi	MS in Cybersecurity GPA : 4.00 BTech in Computer Science and Engineering GPA : 3.5	August 2023 – May 2025 August 2018 – May 2022
-----------------------------------	---	--

RELEVANT COURSEWORK

• Cryptography	• Penetration Testing	• Application Security	• Algorithms Analysis
• Network Security	• Vulnerability Analysis	• Computer Architecture	• Operating Systems

TECHNICAL SKILLS

Languages : Python, C/C++, GoLang, Bash, SQL, Rust, PowerShell
Security Tools : Kali Linux, Burp Suite, Metasploit, Nessus, Wireshark, Splunk, OpenVAS, Palo Alto, SQLMap, OpenSSL, Libgcrypto
Networking : Packet Analysis (Wireshark, tcpdump), Secure Protocols (SSH, TLS/SSL)
Compliance and Frameworks : ISO 27001, OWASP, NIST, PCI DSS
DevSecOps : Docker, Kubernetes, SonarQube, Jenkins

EXPERIENCE

Cybersecurity Engineer (Intern) Protiviti	July 2024 – September 2024
<ul style="list-style-type: none">Developed a DNS Resolver tool to automatically resolve subdomains and IPs for a given domain, storing results in an Excel file to facilitate efficient vulnerability assessments.Engineered an Active IP Finder tool to automate the discovery of active IPs within subdomains of a given domain, with results exported to an Excel file for streamlined analysis.Conducted penetration tests across various systems, uncovering 10+ vulnerabilities, and delivered actionable remediation strategies, reducing risk exposure by 50%.	
GenAI Intern SymphonyAI	June 2024 – July 2024
<ul style="list-style-type: none">Automated script execution workflows by dynamically altering variables, consolidating retailer-specific scripts into a single modular script, reducing redundancy and improving operational efficiency by 40%.Built and maintained interactive dashboards and reports to visualize key performance indicators (KPIs) and metrics, improving accessibility and stakeholder decision-making processes.Collaborated with cross-functional teams to deploy AI-driven solutions, enhancing data processing speed by 5x and improving overall system performance.	
Software Developer PayTM (India's Biggest Digital Finance Company)	June 2022 –August 2023
<ul style="list-style-type: none">Secured multi-platform payment systems by implementing PCI DSS-compliant 3D Secure payment solutions, mitigating potential financial losses of \$30M and reducing fraud.Developed and optimized transaction flows, increasing efficiency by 50% while implementing secure wrappers and API hardening to protect sensitive user data from potential breaches.Identified and resolved vulnerabilities in token-based payment methods, preventing exploits such as replay attacks and enhancing overall payment gateway security.Designed and maintained distributed systems using Kafka, Spring Boot, and sharding mechanisms, ensuring high availability, fault tolerance, and secure transaction handling.	

PROJECTS

LintAid: Seamless Linter Integration Python, Npm, CLI, OpenSSF, OWASP	Spring 2024
<ul style="list-style-type: none">CLI tool that seamlessly integrates linters into existing projects for various programming languages.Contributed to improving code quality, security, and performance by facilitating the adoption of linters.Addressed common developer concerns regarding linting, such as the tedious setup process.	
OpenTelemetry Security Assessment Git, OpenSSF, OWASP, Threat Modelling	Fall 2023
<ul style="list-style-type: none">Crafted a security assessment for the OpenSSF project of OpenTelemetry.Conducted Threat Modelling for security risks and overall security model for the project.Analysed the project needs and deliverables to provide insights about the company from a security perspective.Assessment is reviewed and merged in the official repository of the OpenSSF projects.	
DESy: Decentralized Education System Hyperledger Fabric, Node.js, Rest.js, GoLang, Python	May 2022
<ul style="list-style-type: none">Blockchain implemented education system, which makes students in control of their studies.Executed a Government of India project to implement New Education Policies.Established a blockchain consortium of universities, empowering students to select their preferred university and courses.	

AWARDS AND CERTIFICATIONS

Academic Excellence Award for 4.0 GPA New York University	Fall 2025
Top 5 out of 200 participants VIVID CTF National Centers of Academic Excellence in Cybersecurity (NCAE-C)	Spring 2024
1st Position in In-Person Teams Jersey CTF New Jersey Institute of Technology	Spring 2024
Cybersecurity & IoT Certification University System of Georgia (online) Certificate Link	May 2020
Machine Learning Certification Stanford University (online) Certificate Link	June 2020