Pratham Gupta

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

EDUCATION

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

RELEVANT COURSEWORK

- Cryptography
- Network Security
- Penetration Testing
- Software Supply Chain
- Machine Learning
- Computer Architecture
- Algorithms Analysis
- Operating Systems

TECHNICAL SKILLS

Languages : C/C++, Python, Java, GoLang, Javascript, HTML+CSS, SQL, XML, JSON, C#, Scala, Rust, Solidity

Frameworks : Node.js, Flask, Django, ExpressJS, Bootstrap, ReactJS, GraphQL, Kibana

Security and API Tools : Linux (Configuring and Managing), Git, Docker, Kubernetes, SQL Server, Postman, Kali, Metasploitable, Wireshark, Jenkins, GitHub, JUnit, WordPress

Others : Agile (Scrum/Kanban), OWASP, Debugging, Threat Modelling, Root Cause Analysis

EXPERIENCE

Cybersecurity Intern | *Protiviti*   *July 2024 – September 2024*
- Conducted multiple penetration tests, enhancing system vulnerabilities identification and mitigation strategies.
- Created and maintained the PenTestTools repository on GitHub, which is utilized by a growing user base for cybersecurity testing and training.
- Developed a social engineering detection tool to analyze and mitigate domain-specific social engineering attacks.
- Learned and implemented advanced security profiling techniques, contributing to improved threat detection accuracy.

GenAI Intern | *SymphonyAI*   *June 2024 – July 2024*
- Automated script execution by dynamically altering variables, consolidating multiple retailer-specific scripts into a single, versatile script, reducing redundancy and manual intervention.
- Conducted advanced data analytics to process and analyze data sets, improving data processing efficiency by 5x.
- Performed exploratory data analysis, discovering critical patterns, and trends that enhanced decision-making processes across the organization.
- Built and maintained comprehensive dashboards and reports to visualize key performance indicators and metrics, streamlining stakeholder reporting and improving data accessibility.

Software Developer | *PayTM (India's Biggest Digital Finance Company)*   *June 2022 –August 2023*
- Mitigated potential loss of ₹30 million by swiftly implementing new government guidelines for 3D secure payments through Multi-Platform Gateway Systems. Finished the whole development process with strict and fast deadlines.
- Code used by most of the MPGS payment transactions following 3DS 2.0 policy (As of Jul 2023).
- Increased transaction efficiency by 50%, optimizing wrapper flow on multiple cards for acquirers like MasterCard, VISA, and American Express
- Fixed a bug of the token-based payment methods, reducing fraud from credit/debit cards and digital wallets. Helped in fixing the issues without loss of business.
- Developer in the Affordability Transactional team for Paytm Payments. Using various technologies such as Kafka, Sharding spheres, Spring boot and DTO's for this project.

PROJECTS

LintAid: Seamless Linter Integration | *Python, Npm, CLI, OpenSSF, OWASP*   *Spring 2024*
- 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*
- 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*
- 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

VIVID CTF | *National Centers of Academic Excellence in Cybersecurity (NCAE-C)*   *Spring 2024*
- Top 10 out of 200 teams participating

Jersey CTF | *New Jersey Institute of Technology*   *Spring 2024*
- 1st in the in-person teams.

Cybersecurity & IoT | *University System of Georgia (online)*   *May 2020*
- Certificate Link

Machine Learning | *Stanford University (online)*   *June 2020*
- Certificate Link