Shreyan Gupta

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EDUCATION

Drexel University   September 2022 - June 2027
B.S. in Computer Science; Minor in Security Technology   *Cumulative GPA: 3.42/4.0*

Relevant Coursework: Network Administration, IT Security, Intro to Computing & Security Technology, IT Security Policies, Systems & Software Architecture, Advanced Programming Tools & Techniques, Systems Programming, Data Stuctures

WORK EXPERIENCE

Web Development Intern   Delhi, India
Elar Industries   *June 2023 - September 2023*

– Developed and deployed a **secure web application** for a cable manufacturing unit, using input validation, output encoding, and content security policy (CSP) to **prevent XSS attacks**, boosting **traffic by 450%**

– Constructed a robust **admin panel** for employees using **Auth0** and **Google OAuth single sign-on**, ensuring correct identity and access management using **Oracle Identity Management**, maintaining **SOC 2 security standards**

– Automated the **inventory management system**x using **Oracle MySQL database**, implementing **AES-256 encryption** and **role-based access control**, reducing inventory losses by **over $6,000 monthly**

Software Systems Developer   Remote
Gamesense.pub   *February 2021 - August 2022*

– Reworked the company's **existing login system** to be more secure by implementing **OWASP guidelines** and the **NIST framework**, ensuring the protection and integrity of data of **over 10,000+ users**

– Managed and upgraded **Ubuntu-based AWS EC2** server infrastructure for over **120 users**, enhancing security with **AWS Shield & WAF**, achieving **96.4% uptime over 12 weeks** of runtime

– Optimized web application performance and security using **Cloudflare CDN** and **SSL/TLS encryption**, achieving a **40% improvement in load times** and enhancing **data protection** for user sessions

CERTIFICATES & INVOLVEMENTS

– **Endpoint Security - Cisco Systems Inc. ⚭ -** Proficiency in Advanced Antimalware Protection and Application Security, Mitigating IP/TCP/UDP Vulnerabilities, and Developing Robust Network Security Infrastructure

– **CyberSecurity Professional Certificate - Google LLC. ⚭ -** Proficiency in Cybersecurity Fundamentals, focusing on Network Security with Incident Response & Threat Mitigation Techniques, including Foundations of Linux

– **Dean's List -** Merit-based award signifying high-GPA academic excellence at Drexel University

– **Drexel CyberDragons -** Active member of ethical-hacking club, exploring hands-on labs & ready-to-attack machines

SKILLS

Programming	Python, C, C++, C#, ASP.NET, Bash, SQL, JavaScript, Java, LUA
Security Technology	Nmap, Hashcat, Aircrack-ng, Wireshark, John The Ripper, Burp Suite, Shodan
Cloud Computing	Amazon Web Services (EC2, Shield, WAF), Microsoft Azure (VM, Function, DevOps)
Operating Systems	Linux (Kali, Ubuntu, Debian, Mint), macOS, Windows Powershell
Tools & Technologies	Git, Docker, Postman, OSINT, Wordpress-CLI, Microsoft Office 365 Suite

SELECTED PROJECTS

HELL.LUA (February 2021) ⓖ

– Developed a **LUA** script with **FFI in C** to authenticate users using **GPU IDs**, enhancing gameplay security by **preventing unauthorized access** and reducing **third-party cracking attempts by 95%**

– Securely loaded scripts from a **remote server**, utilizing **VM escape** techniques to gain **privileged access**, achieving an average of **192 ms detection time** over **34 mitigated of 36** total hacking attempts

Deliverrr (February 2024) ⓖ

– Built a full-stack **food ordering web application**, incorporating **JWT (JSON Web Tokens)** & **GraphQL APIs** to allow **fully-authenticated user sessions**

– Implemented **AES-256 data encryption** in **MongoDB** to protect sensitive user information, integrating **secure data storage** and payment processing with **OAuth** and **Stripe API**, enhancing transaction safety

HexCrypt (February 2023) ⓖ

– Designed a **multi-layered cryptographic algorithm** integrating **RSA** for asymmetric encryption and **custom Caesar cipher obfuscation** for robust data integrity and protection

– Deployed the algorithm on **Azure Functions**, utilizing the **Python Secrets library** for secure random number generation and **Inflect** for number-to-text conversion, implementing **regular key rotation** for enhanced security