

Shreyan Gupta

✉ shreyan.gupta@drexel.edu | 🌐 RA1NCS | in /in/gshreyan | 📧 gshreyan.tech | ☎ +1 (267) 251-3322

EDUCATION

Drexel University

September 2022 - June 2027

B.S. in Computer Science; Minor in Security Technology

Cumulative GPA: 3.50/4.0

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

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