

PARAS SAXENA

Phone: +1 (551) 248-3207 || Email: parass@andrew.cmu.edu, parassaxena1998@gmail.com
Address: 1914 Murry Avenue ,36, Pittsburgh, Pennsylvania, USA, 15217

OBJECTIVE:

Computer science graduate with a strong passion for security and privacy. Experienced in development and secure coding with over 3 years of work experience in various IT projects.

EDUCATIONAL QUALIFICATION

Carnegie Mellon University | Pittsburgh, PA | master’s in information security – Applied | January 2023 to May 2024

Major: Computer Science | **School location:** Pittsburgh, Pennsylvania

Teaching Assistant for Introduction to Information Security

Course Taken: **Introduction to Computer Systems* (15513), Secure Coding*, Hacking101*, Fundamentals of Telecommunication***

Introduction to Information Security: Cryptography, Access Control, Vulnerabilities, Policy, Privacy, Management

Applied Information Assurance: Defense-in-Depth, Foundations, Threats, Host Security, Network Security, Network Monitoring, Cryptosystems, Encryption, Incident Response, Digital Forensics, Security Protocol.

Cyber Risk modelling: legal compliance, threat modelling, MITRE ATT&CK, the Common Vulnerabilities and Exposures database, and popular risk frameworks (STRIDE, PASTA, NIST, Vulnerability Assessment, etc.)

Jaypee University of Engineering and Technology | MP, India | Bachelor of Technology in Computer Science and Engineering|June2016 to June 2020

Major: Computer Science

WORK EXPERIENCE

Company – Carnegie Mellon University | Location Pittsburgh, USA | **Research Associate** | *August 2023 – Present*

- Developing a web application for combining public and shuttle transit systems.
- Designed to cater to the unique requirements of senior citizens, enhancing their mobility.
- Prioritized data security and privacy through strong protective measures.
- Incorporated user-friendly features for improved accessibility.
- Ensured secure deployment for a reliable experience.

Tech Stack: React Js, Django, AWS.

Company – Carnegie Mellon University | **Teaching Assistant (Introduction to information security)** | Location Pittsburgh, USA | *August 2023 – December 2023*

- Conducted recitation for homework, conducted Office hours to help solve doubts.
- Was responsible to mentor 13 students.

Company – Cognizant Technology Solutions India Private Limited | Location Pune, India | **Associate (Developer)** | August, 2020 – December, 2022

- Developed and maintained a web application for a pharma platform with a focus on MVC architecture and custom logic for validation. Integrated other systems with the platform and handled integration management.
- Successfully onboarded 5 new countries and implemented multilingual features with more than one language, utilizing knowledge of web standards, cross-browser compatibility, and modular front-end components. Performed analysis, design, development, and testing for new features and conducted POC for special requirements.
- Led a team for web module development and knowledge transfer, utilizing expertise in client-side MVC JavaScript frameworks like ReactJS.
- Transformed a legacy system, fixed critical bugs, and enhanced the codebase using best code practices and standards. Refactored legacy system code on the pharma platform, improving performance, scalability, and maintainability.
- Analyzed requirements, developed custom solutions, cleaned up code, and created comprehensive documentation, adhering to Agile methodologies.
- Utilized expertise in development of data extraction and manipulation tool to support the usage of approximately 30,000 medical representatives' personal identifiable information (PII) bi-weekly, ensuring the highest levels of data security. Utilized knowledge of browser rendering behavior and performance to improve the tool's efficiency.
- Educated end-users about the platform's new features, providing valuable insights and guidance to help them make informed decisions about the cutting-edge application.

Teach Stack: LWC, MVC, ReactJS, Aura, Apex, Salesforce Community

PROJECTS:

Game: Developed a Go-based multiplayer game server with functionalities for player connection, game management, and robust error handling, enhancing skills in network programming and collaborative development.

C Projects: Malloc (built custom implementation of malloc function from scratch) , Shell (built a shell program from scratch) , Proxy Lab (built multithreaded proxy server) , implemented LRU cache

Secure File System: Implemented a Secure file system with encryption and best secure coding practices (built it, break it)

Vidly (Movie Renting) Front End based on Reacts , application was a clone of Netflix with features such as (Sales) , (Recommendation System) , (User rating system) and backend is based on AngularJS.

Games: This is a web-based game compatible for all size devices this game utilizes client-side rendering and thus does not require a server to process the game. Game was the implementation of classic Rock Paper Scissor.

Technical Skills:

- Programming Languages: C, C++, Python 3, HTML, CSS, JavaScript, Apex, Aura
- Framework/Library: React.JS, Bootstrap, LWC.
- Technology: Docker, VMWare, Linux, Active Directory, CI/CD

- Security Tools: Metasploit, n-map., Wireshark, OWASP, Security-Onion, Splunk, Elastic, Endian, Arp watch, DNSSEC, Endian Firewall, OSSEC, Splunk, Snort, NIST

Certification:

- Introduction to React Development | Coursera | 2019
- Certified in Cyber Security ISC2 | (ISC)2 | July 2023
- Salesforce Platform Developer 1 | Salesforce | 2022
- Networking Basis | Cisco | August 2023
- Introduction to Cyber Security Specialization | NYU Tandon School of Engineering | January 2021