Gaurav Sachdev

EDUCATION

M.S. in Information Security (CGPA: 3.96)

Jan. 2021 - Dec. 2022 (Expected)

Purdue University, West Lafayette, IN

Relevant Coursework: CNIT 471-Vulnerability Analysis and Testing, CS 555-Cryptography, CS 526-Information Security, CS 528-Network Security, CS 523-Social, Economic and Legal Aspects of Security.

B.Tech. in Computer Science and Engineering (CGPA: 8.7/10)

Aug. 2016 - May 2020

SRM Institute of Science and Technology, Kattankulathur, India

EXPERIENCE

Developer, Graduate Professional, Scientific Solutions Group

Mar. 2021 - Present

Purdue University, West Lafayette, IN

Project 1: Simple-G Tool on MyGeoHub

- Participated in the revamp of the tool used to study sustainability issues in the global food water environment nexus.
- Designed and Implemented the frontend, map display with gdal and database to track jobs in a Python3 Jupyter Notebook.
- Improved the precision of the tool by adding two additional parameters and an option for custom config files.
- Collaborated with the team to migrate to the new job submission API and deploy it to production.

Project 2: GeoEDF Framework (Current)

- Contributed to the GeoEDF framework to simplfy data wrangling for geospatial reserach workflows.
- Designed and developed three resuable blocks for the framework as connectors and processors.
- · Reduced development time by not having to create new workflows from ground up.

Intern, Vulnerability Assessment, Penetration Testing and Risk Assessment

Dec. 2018

Ernst and Young, India

- Researched about Threat Modelling, Auditing, ISO 270001 and NIST guidelines as part of Risk Assurance team.
- Authored and presented a report of six secure code review tools to add to the repertoire of the VAPT team.
- Detected over five vulnerabilities on live websites during penetration testing.

Summer Intern, Mobile App for COAL PSMS

June 2018

mjunction service ltd, India

- Contributed to the IBMD Sahaj android application to place and manage coal orders.
- Added multi-language support thorughout the app and an FAQ chatbot.
- Upgraded the experience for users who were not fluent in English to navigate the app.

Summer Intern, Software Engineering

June 2017

Tata Steel, India

- Optimized the grouping of metal springs orders for mother coil width maximization to reduce waste by 12%.
- Implemented the tools and techniques involved in the data prediction and regression in R.
- Presented the improved methodology with statistical analysis of historical orders to show impact.

Projects

gauravsachdev.github.io/Blog | Jekyll, HTML, CSS, Javascript, Git

- Authored walkthroughs and tutorials for 13 ctfs completed and 4 tutorials for commonly used tools like SQLMAP.
- Host and maintain the blog and portfolio website on Github pages.

Standalone Database for Mukti NGO | Python3, Tkinter, SQL

- · Consolidated the various paper ledgers for the Mukti NGO under one SQLite database with redundancy.
- Developed an easy to use front-end with a search functionality using Python3's Tkinter GUI toolkit.

Final Year Project for B. Tech.: Storing Medical Data on a Blockchain | Solidity, Strato Blockapps, Truffle

- Cooperated to create a proof-of-concept decentralised blockchain application for storing medical data.
- Designed the application to store data in the form of text and files using InterPlanetary File System.

TECHNICAL SKILLS

Languages: Python, C, C++, Java, SQL, BASH scripting, JavaScript, HTML, R.

Frameworks: Worked with the MEAN (Mongo DB, ExpressJs, AngularJS and Node) and LAMP (Linux, Apache, MySQL, and PHP) stacks, Oracle, SQLite, MySQL, NodeJS, Firebase, OWASP Top 10, Docker, Git, Android Studio.

Tools: Proficient with tools available in Kali Linux and Parrot such as Burp Suite, Nmap, John the Ripper, Nessus, Wireshark. Certificates:

CEH v10 (Certified Ethical Hacker): By EC-Council, Certificate Number: ECC7329846015. June 2019.

Software Security: By University of Maryland (Coursera). July 2019.

Usable Security: By University of Maryland (Coursera). October 2018.

Bitcoin and Cryptocurrencies CS198.1x: by Berkeley (edX), August 2018.

CCNA Routing and Switching (netacad.com): Introduction to Networks, Routing and Switching Essentials, Scaling Networks and Connecting Networks Conducted on Cisco Networking Academy.