Gangili Sai Charan

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Education

Illinois Institute of Technology, Chicago, IL.

08/2023

• Master of Science (Data Science, 1st Sem (Fall 2023))

MLR Institute of Technology (MLRIT), Hyderabad.

08/2016 - 05/2020

• Bachelor of Technology in Electronics and Communication Engineering, GPA 3.2

Work Experience

CognitivZen Technologies

malicious data

Associate Software Engineer

07/2021 - 07/2023

- Build a web application based on Application Programming Interfacing (API)
- Created an In-house web application to check the security of an application by sending malicious data into application URL
- Added a Role-Based-authentication (RBAC) to limit access for users
- Developed code to efficiently store and retrieve data from non-SQL databases, contributing to seamless data management
- Integrated an OWASP ZAP tool into application to perform a crawl on application to fetch all URLs present in application
- application
 Performing attacks on URLs in every possible way (URL, headers, cookies) to make vulnerabilities to get exploited using
- Performing grading on exploited data with CVSS score
- Deploying application into the QA server for quality testing
- Played a pivotal role as a Core member in developing an in-house automation framework, achieving a remarkable 40% reduction in work complexity through successful implementation
- Crafted SQL scripts to facilitate CRUD operations and establish crucial relationships as per client specifications, aiding in seamless application deployments

Technical Skills

Languages: Python, Java, C, SQL.

Software Development: Data Structures, Algorithms, Object Oriented Programming, Agile Methodologies.

Lib/Frameworks: Flask, FastAPI, VTAF2, Kafka. **Databases:** PostgreSQL, MySQL, MongoDB, Redis.

Python Modules: NumPy, Pandas, Matplotlib, OpenCV, Alembic, Faker.

Tools: Git, VS Code, GitLab, Docker, OWASP ZAP, Splunk, Azure DevOps.

Projects

MD.Xplatform.Kaptaan Mac Cloud Inventory - Microsoft

01/2022 - 03/2023

Led strategic orchestration and oversight of a robust inventory system, Kaptaan, designed to optimize performance and enhance operational efficiency. Spearheaded the integration of commander agents into the ecosystem, expertly analyzing and registering agents with auto-generated tokens and host details. Skillfully managed tracking and monitoring of registered agents, leveraging API-driven solutions to execute commander actions, each representing intricate orchestration steps and commands for execution across commander agents. This pivotal role entailed a deep focus on precise message dissemination through Azure Service Bus via Lieutenant, ensuring seamless communication and coordinated execution.

Tech Stack: Python, Postgres SQL, Alembic, FastAPI, Docker.

WAS (Web attack Simulator) - Virsec

07/2021 - 10/2022

Led a dynamic initiative focused on rigorous web application security testing, encompassing thorough URL analysis and targeted attacks encompassing URL, header, and cookie vectors. This proactive approach ensured vulnerabilities were meticulously identified and addressed prior to project deployment for end-users. Employed advanced Web Application Security (WAS) tools to generate comprehensive attack reports, evaluating the severity of vulnerabilities based on their Common Vulnerability Scoring System (CVSS) scores. Additionally, spearheaded enhancements including robust database versioning and successful implementation of role-based authentication, reinforcing the project's security framework and ensuring data integrity.

Tech Stack: Python, Flask, Redis, MongoDB, Docker, Git, OWASP ZAP.

Implementation of home security system using deep learning for security application 01/2020 – 03/2020

Implemented an innovative home security solution using deep learning techniques to bolster security applications with a team of 4 engineers. The project focused on real-time person detection at the doorstep, capturing and storing individual facial profiles. Leveraging trained models, the system efficiently categorized individuals into authorized, unauthorized, and suspicious categories, storing the records in an owner-assigned database. This functionality serves as a valuable tool for law enforcement, aiding in suspect identification through advanced face recognition algorithms.

Tech Stack: OpenCV, NumPy, Pickle, Jupiter Notebook, RPI.

GitHub Repository Link - Implementation of home security system using deep learning

Awards and Achievements

- Published journal paper on "implementation of home security system deep learning process for security application
- Received an Appreciation letter from EVP for delivering critical tasks on time with no bugs

Personal Traits

- Creative, Disciplined, and Adaptable to new concepts and changing work environments
- Eager to learn new things and good communication skills
- Team player and a good leader

Certifications

- Complete Python Bootcamp: Go Beginner to Expert in Python 3 **UDEMY** (04/2020)
- SQL Beginner to Guru: MYSQL Edition Master SQL with MYSQL **UDEMY** (04/2020)
- Python for ABSOLUTE beginners **UDEMY** (04/2020)
- Certified by **NPTEL** in completing Core Java (05/2019)
- Certificate from IETE Forum (10/2018)
- Certificate in Volunteer Appreciation by **PERNA 2018 ATI** (04/2018)
- Certificate in Working Model making by **BITS Pilani (ATMOS)** (12/2017)
- Certificate in Science Fair by **MLRIT** (02/2017)
- Certificate in Working Model making by **CMR ENGINEERING COLLEGE** (01/2017)