# **Gangili Sai Charan**

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# **Summary**

Pursuing Master's in Data science with 2 years of software development and data analysis. Worked on B2B Security exploiting application development and Data resource allocation. Proficient in Python, Java, R, SQL, Power BI, Excel, ETL and Tableau. Skilled in Data Extraction and Data Visualization. Strong academic background in statistics, Including Natural Language Processing predictive modeling and social network analysis. Holds Certifications in Python, and SQL.

#### Education

Illinois Institute of Technology, Chicago, IL

12/2025 - 08/2023

• Master of Science (Data Science, (Fall 2023))

MLR Institute of Technology (MLRIT), Hyderabad.

05/2020 - 08/2016

Bachelor of Technology in Electronics and Communication Engineering, GPA 3.2

## **Work Experience**

#### CognitivZen Technologies

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 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
- Performing attacks on URLs in every possible way (URL, headers, cookies) to make vulnerabilities to get exploited using malicious data
- 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
- 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, seaborn.

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 integration of commander agents into 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. 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

Served as a member of a large-scale project combined cutting-edge data science ideas with web application security applications. WAS project covered URL, header, and cookie vectors through in-depth URL analysis and tailored assaults. utilized data science techniques and sophisticated Web Application Security (WAS) technologies to produce comprehensive attack reports. The Common Vulnerability Scoring System (CVSS) ratings were used in these reports to assess seriousness of vulnerabilities in addition to identification. In addition, applied data-driven insights to plan improvements as strong database versioning and role-based authentication. These improvements reinforced project's security architecture and guaranteed data consistency, demonstrating integration of data science methodologies in context of online security testing and improvement.

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

#### Implemented home security system using deep learning for security application

01/2020 - 03/2020

Implemented an innovative home security solution with deep learning techniques to bolster security applications with a team of 4 engineers. The project focused on real-time person detection at doorstep, capturing and storing individual facial profiles. Leveraging trained models, system efficiently categorized individuals into authorized, unauthorized, and suspicious categories, storing records in an owner-assigned database. Security 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 – <u>Implementation of home security system</u>

# **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 within a short deadline with 100% efficiency

## **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)