

# GONELLA SIVA SAI SURYA PRAKASH

Bengaluru, Karnataka

+91-9880410689

gonellasurya2005@gmail.com

LinkedIn

GitHub

LeetCode



## EDUCATION

### PES University

B.Tech in Computer Science & Engineering - **CGPA - 8.73** (As of sem-4)

Aug-2023 – Present

Bengaluru, India

### Air Force School, ASTE

CBSE Class 10 - **Percentage - 95.33%**

May-2010 – Apr-2023

Bengaluru, India

CBSE Class 12 - **Percentage - 93.40%**

Bengaluru, India

## COURSEWORK / SKILLS

- Python
- C
- C++
- MySQL
- JavaScript
- ReactJS
- MongoDB
- Linux
- GitHub
- Git

## EXPERIENCE

### Research Intern

Center for Computer Networks and Cyber Security (CCNCS), PESU

Jun-2025 – Jul-2025

- \* Learned software-defined networking (SDN) concepts and gained practical experience with ONOS, mininet, RASA, InfluxDB, and Grafana for real-time monitoring and data visualization.
- \* Implemented a RASA-based chatbot integrated with ONOS via REST APIs, enabling efficient real-time access to port and flow statistics and minimizing manual intervention.

## PROJECTS

### RASA-Driven SDN Tool — ONOS, Atomix, Mininet, RASA, Python

Jun2025 - Ongoing

- \* Built a **RASA-powered** conversational assistant enabling real-time monitoring, health checks, and fault detection for distributed SDN controllers via ONOS REST APIs.
- \* Simulated SDN networks using **Mininet** and implemented custom RASA actions for automated flow queries and troubleshooting.

### SpaceNet-Network Speed Dashboard — Python, Tkinter, Sockets, MongoDB

Jan2025 - Mar2025

- \* Built a **space-themed interactive dashboard** to monitor real-time latency, bandwidth, and packet loss using TCP/UDP socket simulation.
- \* Stored and visualized metrics using **MongoDB** and **Matplotlib**, with congestion alerts triggered by threshold logic and displayed in a responsive Tkinter UI.
- \* Implemented a **multi-threaded architecture** for simultaneous server handling, data storage, and live graph updates without blocking the GUI.

### Personal ChatRoom — Python, Tkinter, UDP Sockets, Threading

Dec2024 - Jan2025

- \* Developed a **GUI-based UDP chat application** with real-time messaging capabilities, featuring customizable network settings and cross-platform compatibility using Python socket programming.
- \* Implemented **multi-threaded architecture** with responsive UI design including dark/light theme switching, zoom controls, and scrollable message display for enhanced user experience.

### Fitzen: A Fitness Tracker Application — HTML, CSS, JavaScript, MongoDB, React

Nov2024 - Feb2025

- \* Developed a fitness tracker app using the **MERN stack** for fitness enthusiasts to monitor their activities.
- \* Provided users with tips, motivation, and activity tracking via a clean and responsive interface.

### Weather & AQI Tracker using APIs — Python, Tkinter, OpenWeatherMap APIs

Nov2023 - Feb2024

- \* Built a Tkinter-based app that verifies city names using the **OpenWeatherMap API**.
- \* Displays environmental data like **Air Quality Index (AQI)** and detailed weather information.

### Personal Calendar — Python, Tkinter, MySQL

Oct2022 - Jan2022

- \* Developed a “Social Calendar” application using **Tkinter** for the GUI.
- \* Implemented **MySQL** database integration to manage birthday records efficiently.

## CERTIFICATIONS & ACHIEVEMENTS

- Prof. CNR Rao Scholarship (*Top 40% in 1st Semester, 3rd Semester, 4th Semester - B.Tech*)
- Top 20 in Hacknight2024 (*PESUECC*)
- Labyrinth – 4<sup>th</sup> position (*CodeChef – PESUECC*)
- Attended workshops by *IIT-Gandhinagar, IISc*
- Sqn. Ldr. Arun Sapre Scholarship Award (*For achieving maximum marks in PCM subjects in class 11, 2021-22*)