

# GARIKAPATI HEMA SANDEEP

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## SUMMARY

**Tech-Savvy Enthusiast** with a keen interest in engineering and a strong foundation in academic principles. Detail-oriented and driven, I possess a solid skill set in communication, teamwork, and problem-solving, developed through rigorous coursework and collaborative projects. A quick learner with an adaptable mindset, I am eager to apply my knowledge in real-world scenarios and take on new challenges to achieve meaningful results.

## EDUCATION

### VELLORE INSTITUTE OF TECHNOLOGY

MTech Integrated Computer Science  
Cumulative GPA: 9.22/10.0

Vellore, Tamil Nadu  
August 2021-Present

### NARAYANA JUNIOR COLLEGE

XII(BIEAP)  
Percentage: 97.6%

Vijayawada, Andhra Pradesh  
July 2019 - March 2021

### NARAYANA SCHOOL

X(APSSC)  
CGPA: 9.8/10.0

Vijayawada, Andhra Pradesh  
July 2018 - March 2019

## ACADEMIC PROJECTS

### Stockanalyzee 🔗

**Tech Stack:** Flask, Numpy, Pandas, Tensorflow, Plotly, Sklearn, Streamlit

AUGUST 2024

- Developed a dynamic stock analysis web application using Streamlit and Plotly, enabling users to visualize stock performance through interactive charts, including time series plots and moving averages. The application fetches real-time data using yfinance and offers year-wise box plots for in-depth analysis
- Implemented a machine learning model for stock price prediction, allowing users to input custom date ranges and visualize both actual and predicted prices. The model, built with TensorFlow and Keras, uses a trained neural network to provide future stock price predictions.
- Enhanced user experience with a customized UI theme** and features such as stock information display, business summary, and an intuitive interface for selecting historical data, ensuring a professional and user-friendly experience.

### Blogit 🔗

**Tech Stack:** Flask Forms, Postgress SQL, Smtplib, Render

OCTOBER 2023

- Developed "Blogit," a Flask-based blog website with secure login and registration features using Flask-WTF forms and authentication.
- Implemented admin-only access control for managing and deleting blog posts, ensuring secure content management
- Utilized SHA-256 hashing with password salting for secure password storage, enhancing user data protection.
- Implemented contact us form using SMTP library when user submits the request to contact admin can receive the request through mail.

## Work Experience

### Internship 🔗

**DRDO- Research Centre Imarat**

Hyderabad, Telangana  
June 2024 – July 2024

- Developed a novel approach to enhance Ring Laser Gyroscope (RLG) performance by integrating Statistical Signal Processing (SSP) and Reinforcement Learning (RL).
- Introduced Dynamic Dither Angle (DDA) and Dither Symmetry Angle (DSA) calculations to mitigate static and dynamic lock-in effects, improving measurement accuracy.
- Utilized Deep Deterministic Policy Gradient (DDPG) to optimize Pseudo Random Noise (PRN) values, leading to significant enhancements in RLG accuracy and reliability.

## ADDITIONAL

**Technical Skills:** SQL, JavaScript, HTML/CSS, Python- Flask, Django, C++, Java, AWS S3, AWS EC2

**Languages:** English (fluent), Telugu (Native), Hindi(fluent)

**Certifications & Training:** Microsoft Azure AI Fundamentals 🔗 ,Hacker Rank Certification in Python 🔗

**Awards:** Merit award for Academics(2021-2022) 🔗 , Merit award for Academics(2022-2023) 🔗