# KARTHEESAN SENTHILKUMAR

 $+916382058580 \cdot \underline{kartheesan2005@gmail.com} \cdot \underline{linkedin.com/in/kartheesan05} \\ \underline{kartheesan.tech} \cdot \underline{github.com/kartheesan05}$ 

### **SUMMARY**

Practical and adaptive Computer Science student with strong skills in full-stack development, backend API design, and secure application architecture. Experienced in building user-focused systems and passionate about delivering reliable, real-world solutions. Highly interested in machine learning, cloud computing, and full-stack, with a hands-on approach to problem-solving and continuous learning.

## **ACHIEVEMENTS AND EXTRA CURRICULAR**

Pentathon 2025 May 2025

 Secured AIR 19 out of 22000 participants from all over India in Pentathon, a national Cyber Security Capture The Flag(CTF) event organised by AICTE. Worked on reverse engineering, web exploitation and cryptography.

# Tech Head, FORESE Club

Dec 2024 - Present

- Developed web apps for the club's events and internal usage.
- Utilized the React framework alongside Node.js and MongoDB, POSTGRESQL to build robust, scalable full-stack web applications. Deployed the web applications to the cloud using Digital Ocean's droplet service.
- Collaborated with cross-functional teams to gather requirements, troubleshoot issues, and deploy updates.
- Implemented an automated CI/CD pipeline ensuring continuous deployment with zero user downtime.

#### **PROJECTS**

C-Sar September 2024

Denoising and Colorizing SAR Images Using CNN models

- Developed a deep learning pipeline to enhance SAR images by denoising and colorizing them.
- Applied DnCNN to effectively remove speckle noise while preserving image details.
- Used a conditional GAN (cGAN) for realistic colorization, trained on paired SAR and RGB satellite images.
- Improved visual interpretability of SAR data for remote sensing and analysis tasks.
- Developed a web application that integrates machine learning model for colorizing SAR images.
- Reduced load time by optimizing backend processes, enhancing user experience significantly.
- · Technologies used: TensorFlow, Flask, React.

#### **SKILLS & TOOLS**

Full-stack development Machine Learning SQL Leadership

Dev Ops Cloud Computing Git & Github Problem Solving

#### **EDUCATION**

# **B.E Computer Science and Engineering**

2022 - 2026

Sri Venkateswara College of Engineering

· Relevant coursework in CS Fundamentals and Mathematics.

#### **ADDITIONAL INFORMATION**

- Languages: English, Tamil
- Programming Languages: Java, Python, C, JavaScript
- Certifications: Machine Learning Foundation Certification, TechA MERN Stack Developer Certification(Infosys Springboard)