# SANTHOSH KOTHANDAN

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SANDY1654

Santhosh Kothandan

Electronics and Communication Engineering student with a passion for Automation. Proficient in programming languages and seeking to apply these skills in a dynamic and innovative environment. Eager to contribute to team success through hard work, attention to detail and excellent organizational skills. Committed to making a significant impact on company goals and objectives

#### Education

•Higher Secondary

2020-2021

Government Boys Higher Secondary School, Cheyyar

Percentage: 82.17

•Bachelor of Engineering in Electronics and Communication Engineering Prathyusha Engineering College, Tiruvallur 2021-2025 CGPA: 8.33

## **Projects**

•Product Detection API using Machine learning

Developed an OCR and YOLOv8-based product detection system for real-time text recognition and product classification.

•Autonomous Drone Navigation System

Built an autonomous drone with Raspberry Pi, integrating sensors and vision with GPS navigation.

•Autonomous Object Manipulation System

Created an autonomous robotic arm, using servo motors for movement and computer vision for manipulation.

•Self-Navigating Rover Model for Planetary Exploration Tasks

Built a Mars Rover with MYRIO, utilizing sensors and motors for autonomous exploration and terrain mapping.

# **Internships**

### • Indian Space Research Organisation

- Working at ISRO gave me hands-on experience in circuit design, testing and data analysis.
- Collaboration with top scientists taught me precision, teamwork and pride, knowing our work contributed to India's space advancements.
- Pantech Solutions
  - Designed IoT-based embedded systems to enable real-time data collection and monitoring, integrating various sensors with microcontrollers for efficient data processing.
  - Implemented communication protocols like MQTT and HTTP, ensuring reliable data transfer between embedded devices and cloud platforms.
- Gradtwin
  - Collaborated on building full-stack features by connecting React-based frontend with Django REST API backend, improving user interaction and data flow.
  - Wrote SQL queries for data storage and retrieval, supporting key functionalities like user profiles, form submissions, and activity logs.

# Certifications

• NPTEL Online Certification – Introduction to Internet of Things

Conducted by IIT Madras via SWAYAM – Completed in 2023.

• ICT Academy – Learnathon 2022

Completed foundational training in emerging technologies including IoT, Cloud, and Python Basics.

## Technical Skills and Interests

Languages: Python, Javascript, HTML+CSS

Hardware: Circuit Designing, LabVIEW

Web Dev Tools: Nodejs, VScode, Git, Github

Cloud/Databases: AWS, PostgreSQL

Areas of Interest: Design and Development, Robotics and Automation

Soft Skills: Problem Solving, Self-learning, Presentation, Adaptability, Flexibility