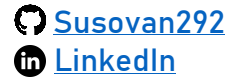




# Susovan Das

Kolkata, West Bengal

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## SUMMARY

CODING Since 2019

Software Engineer & ML Developer skilled in full-stack development, IoT systems, and deep learning. Hackathon winner and IEEE-published researcher with experience building end-to-end cloud, mobile, and AI applications.

## TECHNICAL SKILLS

Languages: Python, Java, C, C++, JavaScript, TypeScript, HTML, CSS

Frameworks & Tools: React.js, Tailwind CSS, Bootstrap, Flask, Django REST, Spring Boot, Node.js

Databases & Cloud: Firebase, MongoDB, PostgreSQL

ML & Computer Vision: TensorFlow, Scikit-learn, OpenCV, NumPy, Pandas, Media Pipe

Tools & OS: Docker, Git/GitHub, Postman, Linux, Windows 10/11

## ACHIEVEMENTS

### [Hackathon Winner and Finalist](#)

- 1<sup>st</sup> Rank in the Inter-college Hackathon **Hack-O-Nit 2025**.
- 8<sup>th</sup> Rank in State-Level Hackathon **Smart Bengal Hackathon 2025**.

### [Published IEEE Research Paper: AI-Driven Crop Disease Prediction and Management System](#)

Developed a deep-learning-based system for crop disease detection using ResNet50, achieving **97.18%** accuracy. Integrated into a web application for real-time disease identification and management.

## PROJECTS & EXPERIENCE

### [Accident Detection and SOS Smart Helmet \(2025\)](#) | Arduino IDE, React Native, Firebase Real-time DB

- Overview: Developed an IoT smart helmet that reduced emergency response delay by **70%** using SMS + GPS alert system.
- Hardware: Built the circuit with ESP32(Micro-Controller), MPU6050(Gyro), NEO6M(GPS), SIM800L(GSM).
- Firmware: Developed firmware using C++ (Arduino) for ESP32 Programming.
- Mobile App: Created a React Native app with real-time tracking using Firebase real-time database and Google Maps.

### [Farm-Guard AI \(2024\)](#) | Python [TensorFlow, Keras, Pillow, Numpy, Flask-API] + React.js + Firebase

- AI-Powered Plant Health Detection: Designed a deep-learning model using ResNet50 achieving **97.6% accuracy** on a dataset of 50,000+ plant images.
- User-Friendly UI: Built a Minimalist web UI with React.js for a seamless experience.
- Research & Development: Compared ResNet50, VGG16 & VGG19 over a Large Dataset of 50,000+ plant images.
- Efficient Backend: Implemented a Flask backend for image inference and connected with React.js frontend.

### [CodeNexUX \(2024\)](#) | React.js, Vite, Firebase, Vercel

- Overview: Created a web-based Developers Community for managing Hackathons, Events, Posts and Projects.
- Features: Developed User-friendly UI, Admin Panel and Joining Forms.

## EDUCATION

Narula Institute of Technology

2023 - 2027

Bachelor of Technology in Computer Science 3rd year (8.5 CGPA in 1<sup>st</sup> year, 8.65 CGPA in 2<sup>nd</sup> year)

West Bengal, India

Kendriya Vidyalaya

2020 - 2022

12<sup>th</sup> PCM - Percentage - 78.66%

Jharkhand, India