

ANKIT SINGH

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https://github.com/Ankit300302 Chennai, Tamil Nadu



SUMMARY

A result-driven AI and Data Science enthusiast with expertise in **Machine Learning, Python, C++, Java, and SQL**. Developed intelligent systems, including an Intrusion Detection and Threat Mitigation System, AI-powered human detection for drones, and a job-finding platform with intelligent recommendations. Skilled in data-driven problem-solving, predictive analytics, and model development. Passionate about building scalable AI solutions, collaborating with cross-functional teams, and staying at the forefront of emerging technologies in AI and Data Science.

EDUCATION

Bachelor of Technology in Computer Science Engineering

Vellore Institute of Technology

09/2021 - 04/2025 Chennai, Tamil Nadu

GPA

8.57 / 10

Class 12 ISC Board

Seth Dwarka Prasad Bajaj Education Center

03/2019 - 07/2020 Mirzapur, Uttar Pradesh

GPA

8.75 / 10

Class 10 ICSE Board

Seth Dwarka Prasad Bajaj Education Center

03/2017 - 05/2018 Mirzapur, Uttar Pradesh

GPA

7.84 / 10

KEY ACHIEVEMENTS

Contribution to Android Club at VIT Chennai

Actively contributed as a member of the Android Club at VIT Chennai, resolving technical issues during events and enhancing skills in Android development and technology.

CERTIFICATES

Certified in C++, C and java

IIT Bombay

2021 Online

https://leetcode.com/u/AnkitSingh2024/

Certified AWS Cloud Practitioner

Amazon

2023 Online

https://drive.google.com/drive/folders/1ELppLH1RhqVGy4vFrEd3UvyFbjXjTnzZ?usp=sharing

Ethical Hacking Certified and Couch Base Certified in Couch Database

Internshala, Couchbase

2023 - 2024 Online

NPTEL Certified in Google Cloud Computing

IIT Kharagpur

2023 Online

SKILLS

Technical Skills

C++, JAVA, Python, C, Android Studio, Arduino, Artificial Intelligence, AWS Cloud, Cloud Computing, Ethical hacking, flask, Google Cloud, Keras, Machine Learning, OpenCV, React.js, RESTful API, Robotics, SQL, TensorFlow, UI Path

PROJECTS

Intelligent Intrusion Detection and Threat Mitigation System

https://github.com/Ankit300302/Intelligent-IDS/tree/main

Next-Gen Network Security with Explainable AI and Adaptive Feature Engineering

- Dataset:** Trained on **175,341 network traffic samples** from the **UNSW-NB15 benchmark dataset**, encompassing **42 features** including protocol type, packet size, and service type.
- Class Imbalance:** Mitigated skewed attack classes (e.g., rare exploits) using **SMOTE oversampling**, boosting minority-class detection by **25%**.
- Feature Engineering:** Dynamically selected **15 high-impact features** via **LightGBM + SHAP analysis**, reducing dimensionality by **35%** without compromising model accuracy.
- Tools and technologies used include Python, TensorFlow, Keras, Flask, OpenCV, and Jupiter.

Job Finding Application

https://github.com/Ankit300302/Final-project

Job Finding Application using React JS and Expo Platform

- Developed a comprehensive job-finding mobile application using **React JS and the Expo platform**.
- The application connects job seekers with potential employers efficiently, providing a user-friendly interface and a seamless experience.
- Includes functionalities such as job search, application tracking, and integration with several job platforms via **RESTful API**.

Human Detection from Aerial Drone Footage using AI

https://github.com/Ankit300302/HumanDetection

AI system for human detection and tracking in aerial drone footage using **advanced computer vision techniques**.

- Developed an AI-powered system for detecting and tracking humans in aerial drone footage, leveraging **HOG descriptors, KCF tracking**, and adaptive scene change analysis for efficient and accurate performance.