Nikshiptha Sonajoke

Senior|Computer Science and Engineering | IIT Jodhpur
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EDUCATION

IIT JODHPUR
B.Tech in Computer Science
2022-present | Jodhpur, India

SRI CHAITANYA COLLEGE
Class 12 | TSBIE
Marks : 986/1000
2022 | Hyderabad, Telangana

SRI CHAITANYA SCHOOL
Class 10| BSET
CGPA : 10
2020 | Hyderabad, Telangana

LINKS

Github:// **nikshipthasonajoke**
Portfolio:// **nikshipthasonajoke**

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Computer Networks
Cyber Security
Virtualization and Cloud Computing
Computer Vision
Software Engineering
Operating Systems
Database Management Systems
Computer Architecture
Pattern Recognition Machine Learning with Probability

SKILLS

PROGRAMMING
C++ • C • Python
Verilog • MySQL

WEB DEVELOPMENT
HTML • CSS • JavaScript • ReactJS

MACHINE LEARNING
Numpy • Pandas • Matplotlib
Scikit-Learn • Machine Learning

TOOLS
Github • Google Colab
VS Code • Canva

EXTRACURRICULAR

- Core Member – Dramatics Society
- Assistant Head – Prometeo'24

EXPERIENCE

INDIANOIL CORPORATION | Machine Learning Intern
Guwahati Refinery

- Fine-tuned YOLOv8 on 5,000+ annotated frames for helmet detection.
- Achieved 95%+ accuracy at 30 FPS, deployed for real-time surveillance.
- Automated CSV logs with timestamps, bounding boxes, and snapshots (200+ daily).
- Reduced manual monitoring and enhanced incident tracking with real-time alerts.
- Tools: Python, YOLOv8, OpenCV, cvzone, Roboflow, Google Colab

PROJECTS

CROP RECOMMENDATION | ML + Web Development |
Feb–May 2024 | Flask, Python, Random Forest

- Developed a Flask-based web app to recommend crops using five soil and weather parameters.
- Achieved 99% accuracy with Random Forest, compared with Logistic Regression and XGBoost.
- Built frontend with HTML, CSS, and JS, deployed app for real-time use.

PET PLAYDATE ORGANIZER | Full-Stack Web App |
June 2025–Ongoing | MERN Stack, Google Maps API, Cloudinary

- Created a social platform for pet owners to organize and join local playdates.
- Built user and pet profiles with React, Node.js, Express, and MongoDB.
- Integrated Google Maps for location-based event creation and Cloudinary for photo uploads.
- Added RSVP, messaging, and filtering by distance, species, and time.

STROKE PREDICTION | Machine Learning Project |
Mar–Apr 2024 | Python, Scikit-Learn, SMOTE

- Built a stroke risk classifier using patient data and preprocessing techniques.
- Handled class imbalance with SMOTE and removed outliers to improve accuracy.
- Achieved 87.3% with KNN, compared models including Decision Tree, Naive Bayes, ANN.
- Applied GridSearchCV for tuning and visualized results using Matplotlib.

STUDENT RESULT PORTAL | DBMS Course Project |
Sep–Nov 2024 | PHP, MySQL, HTML, Bootstrap

- Developed a secure portal for managing student academic records with role-based access.
- Implemented user roles for students, teachers, and admins with login authentication.
- Enabled functionalities for registration, result uploads, and report generation using SQL queries.

ACHIEVEMENTS

- Solved 300+ LeetCode problems, focusing on data structures and algorithms
- Secured a competitive rank in JEE Advanced among 160,000+ candidates