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

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Computer Networks
Cyber Security
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

CERTIFICATIONS

- **AWS Solutions Architecture Job Simulation** – Forage
- **Deloitte Cyber Job Simulation** – Forage

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