DIPESH SONAWANE

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Education

Sinhgad College of Engineering, Savitribai Phule Pune University, India **2020 - 2024**
Bachelor of Engineering (B.E) in Information Technology Engineering | CGPA: 9/10 (expected)
Minor in Data Science and Visualisation (Honors)

Skills

Python | DSA | OOP | OS | CNS | DBMS| ML | Cloud Computing | Snaplogic | AWS | RestAPI | NLP | CV | Git | Linux | ETL

Work Experience

Fyllo | SOFTWARE DEVELOPER INTERN **Dec 2023 - Present**
- Developing Remote sensing solutions for agricultural insights via satellite imagery.
- Advancing in Deep learning CNN-based solutions for Image analysis and prediction.
- Created a Flask-based backend for a dashboard, creating RESTful APIs to fetch data from multiple satellite sources.

Indian Institute of Technology, Mandi | RESEARCH INTERN **Jul 2023 - Dec 2023**
- Developed contactless biometrics using CO3Net, PIQA, and BicycleGAN for enhanced security and authentication.
- Applied cross-domain adaptation for accurate recognition in diverse databases and real-world scenarios by 15%.
- Achieved an impressive **96%** accuracy through conventional deep learning method.

Publications

- ***A Novel A Novel Approach to Vehicular CO2 Emission Predictive Modelling*** (IJOIT, Russia) LINK
- ***A Comparative Analysis of Prediabetes Prediction*** (CINS, BITS Dubai)

Projects

Contactless Palmprint Recognition **Aug 2023**
A contactless palmprint recognition technology that authorizes and authenticates users.
- Working on building a robust **deep learning**-based Palmprint Recognition model using cross-domain approaches.
- Applied Cycle GAN for data synthesis to enhance model reliability, achieving an **EER of 0.5%**.

Global Warming Analysis and Prediction **Mar 2023**
A web application for accurate temperature forecasting (99.58%) using machine learning models.
- Achieved **99.58%** temperature forecast accuracy with Random Forest Classifier and ARIMA.
- Designed a user-friendly web app with HTML/CSS front end and Python back end for seamless data analysis.

Certifications

- AWS Cloud Practitioner Essentials AWS via EDX - Underwent AWS Services overview.
- Python Basics for Data Science IBM - Gained proficiency in key Python concepts for Data Science.
- ML For Crop and Soil Management (IITKgp) NPTEL - Explored ML applications for boosting agricultural yield.
- Introduction to Linux The Linux Foundation - Deep understanding of Linux concepts

Academic and Extracurricular Achievements

- Ranked 3rd in the Department with a **9.8 SGPA** in the 7th semester.
- Represented the STES Rocketry Team with a **Rank - 4** at the Latin America Space Cup Challenge in 2023.
- Institute level finalist at Smart India Hackathon and Kavach Hackathon(Ministry of Edu.)

Positions of Responsibility

STES Rocketry Club | AVIONICS ENGINEER and OPERATIONS HEAD **Nov 2021 - Present**
- Led real-time telemetry, designed PCB, increased 40% funding, and contributed to SRAD motor achieving 1.2 KN thrust.

Campus Ambassador | E-CELL IIT BOMBAY **Jul 2021 - Jun 2022**
- Promoted entrepreneurship initiatives and fostering campus engagement.