## SMIT WANDRE

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### **EDUCATION**

## Michigan State University, College of Engineering, Honors College

Bachelor of Science, Computer Science, GPA 4.00

East Lansing, Michigan August 2023 - December 2026

### **SKILLS**

Languages & Paradigms: Python, Ruby, JavaScript, C, C++, SQL

Web & APIs: Django, Django REST Framework, Flask, React.js, REST API design, HTML, CSS

Data & ML: Pandas, NumPy, scikit-learn, OpenCV, Machine Learning

DevOps & Automation: Docker, Docker Compose, Celery, Redis, PostgreSQL, Git, GitHub Actions

### **EXPERIENCE**

**KNEO Automation** 

Pune, Maharashtra

Machine Learning Intern

May 2024 - August 2024

- Developed an object detection pipeline using Ultralytics YOLOv8 and OpenCV to extract dimensions, angles, and other measurements from industrial blueprints, automating a manual process
- Processed and structured extracted data into Excel sheets, improving data accessibility and analysis for industrial applications and applied machine learning techniques to enhance accuracy and efficiency in blueprint measurement extraction, demonstrating expertise in computer vision and automation

### Department of Computer Science, Michigan State University

East Lansing, Michigan

**Undergraduate Teaching Assistant** 

August 2024 - Present

- Guided two sections of 30 students each, supplying thorough support with course materials during class to promote a strong understanding of critical Python concepts
- Provided online help through the Piazza platform and enhanced student engagement for more than 1200 students

# Research in Sustainable Investing, Michigan State University

Undergraduate Research Seminar

East Lansing, Michigan August 2024 - Present

- Participated in a year-long seminar investigating the impact of sustainability on financial markets in the US,
  Japan, and Europe. Conducted cross-cultural research in collaboration with Setsunan University (Japan) and the Norwegian School of Economics (Norway) to compare sustainable finance practices
- Managed a simulated \$1M stock portfolio, focusing on influence of sustainability on stock value and investment risk

### **PROJECTS**

### **Sensor Anomaly Detection Dashboard**

Personal Project

- Tech: Django, DRF, Celery, Docker Compose, scikit-learn, React, Recharts, PapaParse
- Developed Docker-orchestrated backend for CSV ingestion, hourly resampling, K-Means clustering
- Built React dashboard polling API, parsing CSV, rendering line and scatter charts.

# **Crop Yield Production**

Personal Project

- Tech: Python, Flask, Plotly, Linear Regression
- Developed a complete ML pipeline using Python for predicting crop yields based on environmental data (temperature, rainfall, soil quality).

 Built and evaluated a linear regression model, and deployed an interactive Flask frontend integrated with Plotly visualizations. Demonstrated skills in data preprocessing, model training, evaluation, and full-stack application development.

# **Stock Analysis Dashboard**

## Personal Project

- Tech: Streamlit, Yahoo Finance API, Matplotlib
- Built interactive web app using Streamlit to analyze stock market trends with real-time data from Yahoo Finance API
- Integrated financial indicators (e.g., Moving Averages, RSI, MACD, Bollinger Bands) and visualized insights with Matplotlib and automated metrics including profit/loss percentage and average daily change, enabling customizable user inputs for dynamic analysis