Sai Prasana Panigrahi

859-690-0286 | saai.panigrahi@gmail.com | linkedin/sai-panigrahi | github.com/saai07

Education

Sambalpur University Institute of Information Technology Sambalpur,Odisha
Bachelor of Technology in Computer Science, Specialization in AI and ML *Aug. 2022 – May 2026*

Relevant Coursework

- Data Structures
- OOPS Concepts
- Machine learning
- Database Management
- Artificial Intelligence
- Expert System
- Big Data Analysis
- Probability and Stats

Experience

AI Research Intern – 3D Object Detection May 2024 – August 2024
National Institute of Technology (NIT), Py *Pondicherry , Karikal*

- Conducted research on 3D Object Detection and Path Tracking using state-of-the-art tools like YOLOv10, OpenCV, and the PyTorch vision module..
- Designed and implemented machine learning models to improve the accuracy and efficiency of object tracking in dynamic environments.
- Collaborated with researchers to apply findings to practical applications, such as autonomous navigation and surveillance systems..
- Presented key findings and insights during technical reviews, enhancing project visibility within the research community.

Projects

Food Classifier | *Python, PyTorch, Numpy, Matplotlib, Scikit-Learn* September 2024

∗ Replicated the Tiny VGG Convolutional Neural Network (CNN) for image classification using a custom dataset consisting of pizza, steak, and sushi images.
∗ Trained the model for 50 epochs, achieving a 73 percent accuracy in classifying images into the three categories.
∗ Utilized techniques like data augmentation and fine-tuning to improve model performance.
∗ Gained hands-on experience in implementing CNN architectures and working with custom datasets for real-world image classification tasks

Chess game | *Python, Pygame* February 2024

∗ Developed a chess game using Pygame with a user-friendly graphical interface.
∗ Implemented precise piece movement validation and comprehensive game logic, including checkmate and stalemate detection.
∗ Integrated robust rules for check, checkmate, and stalemate detection, ensuring adherence to official chess standards.
∗ Designed for scalability, with plans for multiplayer functionality and AI-based opponent integration.

Smart Sales Insight Bot | *Python, OpenAPI, Pathway's LLM* February 2024

∗ Built an AI-powered application using Pathway's LLM to fetch real-time sales, discounts, and deals from various online marketplaces globally.
∗ Me and my team designed an HTTP REST API endpoint enabling users to query sales information based on specific parameters
∗ Integrated OpenAI API for Chat Completion and Embedding features to enhance query processing and generate insightful responses.
∗ Delivered a dynamic, user-friendly experience for accessing up-to-date market information efficiently.

Technical Skills

Languages: Python, Lisp, java, SQL (MySql), JavaScript, HTML/CSS,
Frameworks: PyTorch, Tensorflow, Ultralytics - YOLO, Django
Libraries: Pandas, NumPy, Matplotlib, Scikit-Learn, Seaborn, NLTK
Developer Tools: Git, Docker, Google Cloud Platform,Google Collab ,Anaconda, VS Code