Shaan Chanchani

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EDUCATION

Purdue University West Lafayette, IN

B.S.E in Computer Engineering | Concentration in AI/ML | Major GPA: 3.5

May 2025

EXPERIENCE

Machine Learning Engineer, <u>Huddlevision</u>

Miami, FL - Remote

August 2024 - Present

- Designed and developed a state-of-the-art computer vision system combining field registration and player tracking models, enabling automated analysis of football film
- Trained a self-supervised deep learning model for field registration, leveraging synthetic data generation techniques to enhance performance on diverse game footage; achieved 97% median accuracy on unseen test data
- Architected scalable ML backend on GCP to deploy computer vision models for production video analytics services
- Partnered with Tracking Football to deliver advanced performance metrics to 100+ scouting departments across NFL teams and all FBS D1 conferences, revolutionizing the talent evaluation process at the collegiate and high school levels

Software Consultant, BTB Analytics

Jan 2025 – Present

Remote

- Developed ETL pipeline to aggregate College Basketball data from 5 sources, leveraging direct HTML scraping and Selenium-based extraction for dynamic content sites
- Automated updates to processed data every 5 minutes using GitHub Actions to allow for real-time integration with R Shiny dashboard

Teaching Assistant, ECE 57000

Jan 2025 - Present

Purdue University, West Lafayette, IN

• Supporting graduate-level Artificial Intelligence course through grading assignments and hosting weekly office hours

Undergraduate Researcher, Video Analytics for Daily Living Lab

Aug 2022 - Present

Purdue University, West Lafayette, IN

- Leading research on deep learning approaches for pose estimation, developing techniques for limited dataset scenarios
- Led evaluation of animal detection models on large-scale wildlife datasets, processing 1.5 TB of camera trap footage
- Developed a GIS web-app for visualizing and analyzing species classification results at wildlife camera traps

Software Engineering Intern, John Deere

May 2024 – August 2024

Waterloo, IA

- Trained and deployed XGBoost model predicting factory station-to-station time, achieving 118% higher accuracy than existing system metrics
- Built end-to-end data pipeline using SQL and PySpark to process 10M+ records from Oracle/SQL Server databases through enterprise data lake, including custom feature engineering to maintain accuracy during shift changes and breaks
- Containerized solution with REST API utilizing Databricks Model Serving, integrated real-time inferencing within codebase managing autonomous material delivery robots using Python
- Generated \$10M+ in projected annual savings by preventing manufacturing bottlenecks with early intervention; awarded **2nd** place in company-wide hackathon

Teaching Assistant, ENGR-132

Jan 2022 - May 2022

Purdue University, West Lafayette, IN

• Deployed weekly scripts to grade MATLAB assignments from over 150 first year engineering students

SKILLS

Python, C/C++, PySpark, MATLAB, SQL, JavaScript, TypeScript Languages:

ML/Data: PyTorch, Scikit-learn, MLflow, Tensorboard, NumPy, Pandas, Polars, Databricks, OpenCV, SciPy, Optuna

Web/Cloud: React, NextJS, FastAPI, Flask, GCP, AWS, Docker, Streamlit

Tools: Git, GDB, gcc, Valgrind, Make