Skills

- Artificial Intelligence and Machine Learning
- Data Science and Predictive Analytics
- Web Development (React, MongoDB, JavaScript)
- AR/VR Exploration
- Problem Solving and Algorithm Design
- Database Management (SQL, MongoDB)
- Software Development and Deployment

Projects

1. Theft detection in a smart grid environment

Involves using smart meters, real-time data, and machine learning models to detect and prevent energy theft by analyzing unusual consumption patterns and system anomalies.

2.A* vs GBFS in Grid games

A* is optimal and considers both the cost to reach the current node and the estimated cost to the goal, providing the best path but with higher computational cost.

GBFS focuses only on the heuristic (goal) and is faster, but may not always find the optimal path.

4. Reinforcement Learning Grocery Shopping

Designed an environment to find the optimal shopping route for groceries using value iteration, Q-learning, and Representation Policy Iteration.

5. Library Management System

Developed a web-based application using React and MongoDB to manage library operations including adding, searching, and displaying books.

6. Dog vs Cat Classification

Built a deep learning model to classify images of dogs and cats, including custom dataset organization and training pipelines.