



ADVision

Centralized platform leveraging AI, ML, and AR to optimize ad targeting, track user interactions, and enhance engagement through QR codes and image recognition.

ADVision

Background

Managing advertisement campaigns across different companies and regions is a complex task, requiring efficient targeting and engagement strategies. Businesses need an advanced system to optimize ad placement, track user interactions, and leverage modern AI/ML and AR technologies to enhance user experiences. This project provides a centralized solution for managing campaigns through an admin dashboard, integrating AI-driven insights and innovative engagement methods like QR codes and image-based media recognition.

Key Challenges

Each company requires unique ad strategies and campaign assets. Targeted Advertising to ensure ads reach the right audience based on region or industry. Implementing advanced technologies for immersive ad experiences for the consumer across all touchpoints. Real-Time Tracking & Analytics, and providing insights into campaign performance and user engagement.

Seamless Asset Management and supporting various ad formats like images, videos, and interactive media.

Our Solution

We developed an intelligent advertisement campaign management platform that enabled the marketing team to have effective placement of products in different sectors. Admin Dashboard is a centralized hub for managing advertisement campaigns, tracking performance, and managing client assets. Company Client Management with unique Company IDs for each client, enabling personalized campaigns based on industry and target audience. Asset Management to support images, videos, and interactive media with region-specific customization. QR Code Integration for seamless QR code scanning to provide direct access to campaign-related content. AI/ML-Based Advertising with image-based recognition using OpenCV and predictive audience targeting with various system tools. AR-Driven Campaigns enhanced engagement through interactive ads. Real-time insights on customer behavior, ad effectiveness, and engagement using AI/ML models.

Tech Stack

Frontend: React.js / Vue.js, Tailwind CSS / Bootstrap

Backend: Node.js with Express.js / FastAPI, Python (AI/ML capabilities), Flask/Django for additional services

Database: PostgreSQL / MySQL (structured data), MongoDB (unstructured campaign data)

AI/ML & AR Technologies: OpenCV, TensorFlow / PyTorch, ARKit / ARCore

Cloud & Deployment: AWS / Google Cloud / Azure, Docker & Kubernetes, Firebase

Other Tools: Redis (caching), Elasticsearch (analytics), QR Code libraries

Value Delivered

Streamlined campaign handling for multiple companies via a centralized admin dashboard.

Enhanced reach with AI-driven ad placement and audience segmentation.

Engaging AR-based advertisements for higher interaction.

Real-time tracking of campaign effectiveness and customer behavior.

Easy incorporation with existing marketing and advertising systems.

AI and AR-powered advertising solution wherein businesses can optimize their campaigns, enhance engagement, and achieve higher ROI through intelligent ad placements and analytics-

driven decision-making.