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Samtiah Arabia Co. Ltd. شركة سمتية العربية

How Zenith Arabia AI helps Saudi Arabia to use AI to Cut Visual Pollution and Restore Beauty public sector

Computer Vision: Clearing the View

Clearing the View: How Zenith Arabia AI helps Saudi Arabia to use AI to Cut Visual Pollution and Restore Beauty public sector
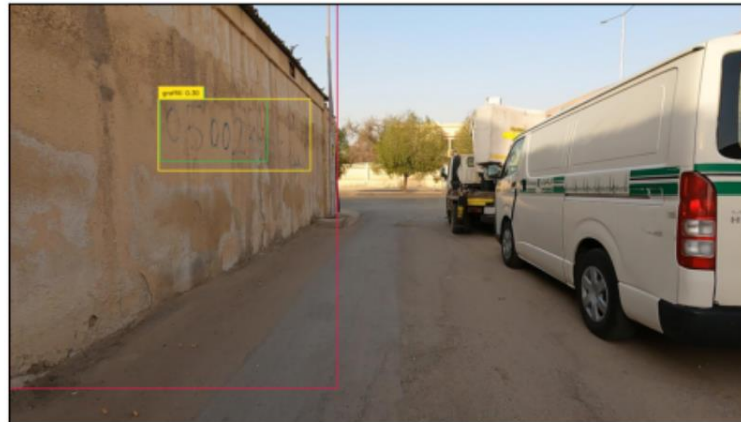
Use Case Overview:

In Saudi Arabia's lively cities, visual distortion is a significant issue. Visual pollution, arising from waste, advertisements, deteriorating buildings, and more, adversely affects citizens' well-being and the environment.

Our solution incorporates advanced technology. We utilize Computer Vision, a sophisticated tool, to rapidly identify and address these visual problems. In doing so, we assist governments in more than just cleaning up the city – we're elevating the essence of urban life, safeguarding culture, and preserving nature for future generations.
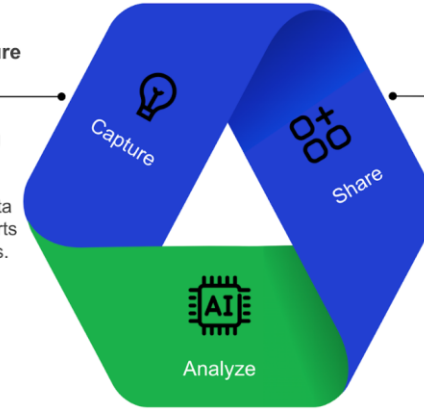

Original   Annotated   Masked

Challenges/Pain Points:

•Manual identification of these visual pollutants is inefficient due to the lengthy time it takes to detect and notify the team about these issues.

•Visual pollution can affect the physical and mental health of people who come into contact with it.

•Visual pollution can distract drivers and endanger pedestrians. It also hurts the beauty of the city and has a negative impact on tourism.

Automatic and Manual Capture of visual distortion points

- Automatic visual pollution monitoring through mobile mapping and hand observation techniques
- Establishing a geographical information system for collected data and managing visual pollution reports and following up on their fulfillments.
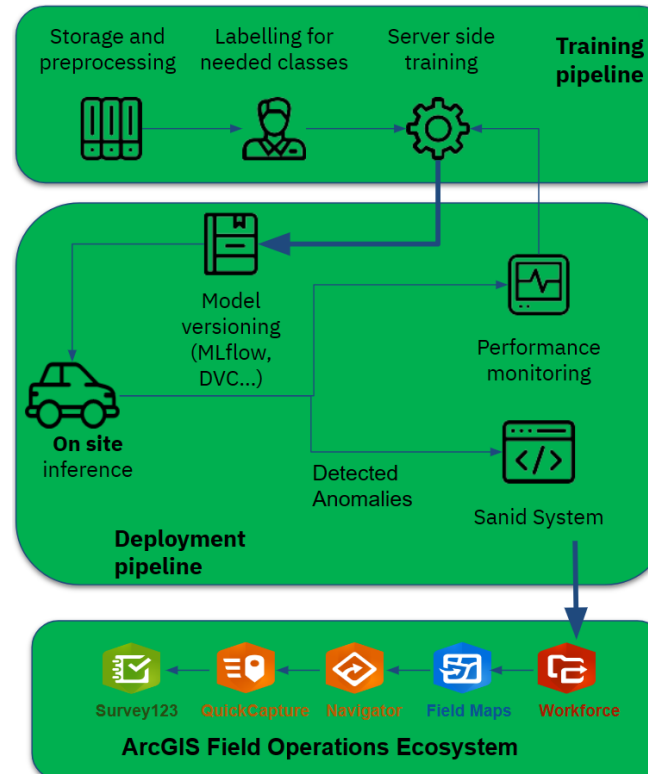
Issuing Reports and Performance Metrics

- Process and analyze data from monitoring and creating visual pollution reports
- Analyze geospatial data and create dashboards

Capture

Share

Analyze

Create AI models to extract features & objects

- Applying AI technologies to automatically identify visual pollutants

Training pipeline

Storage and preprocessing → Labelling for needed classes → Server side training

Deployment pipeline

Model versioning (MLflow, DVC...)

Performance monitoring

On site inference

Detected Anomalies

Sanid System

ArcGIS Field Operations Ecosystem

Survey123 ← QuickCapture ← Navigator ← Field Maps ← Workforce

Workforce

Survey123

Navigator

QuickCapture

Field Maps

Solution:

Our innovative solution leverages state-of-the-art Computer Vision technology, coupled with AI models and GIS databases, to tackle visual distortion effectively. Here's how our approach works:

Benefits:

Comprehensive Approach: We provide a One Stop Shop for Enterprise AI Solutions, eliminating the hassle of managing multiple components and providers.

A Better Image: we make Saudi Arabia more attractive to visitors, investors, and residents.

Improved Quality of Life: Creating a pleasant environment enhances physical, mental, and social health, ensuring the well-being of citizens.

Contact us

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Book Your FREE Consultation now
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