Cypriot SME Providing a Novel Service for Dumping Detection and Waste Management with Satellite Imagery and Artificial Intelligent (AI)

Summary

Profile type	Company's country	POD reference
Technology offer	**Cyprus**	**TOCY20230925002**

Profile status	Type of partnership	Targeted countries
PUBLISHED	**Research and development cooperation agreement** **Commercial agreement with technical assistance**	**• World**

Contact Person	Term of validity	Last update
Noriko MITA	**2 Oct 2023** **1 Oct 2024**	**2 Oct 2023**

General Information

Short summary

Cyprus-based company offering a service that utilizes high spatial resolution satellite imagery & advanced AI models to detect illegal dumping activities, primarily targeting municipalities, local communities, environmental NGOs, waste management companies and businesses involved in outdoors cleaning, waste reuse, and circular economy. The service provides access to online analytics with a GIS map of identified dumping locations, enabling effective monitoring and management of dumping incidents.

Full description

An AI-driven Software as a Service (SaaS) that leverages high spatial resolution satellite imagery to identify illegal dumping in a designated area of interest (AOI). It employs proprietary AI models developed by the cyprus-based company, which have been trained on vast amounts of data to accurately detect dumping patterns. The service is targeted towards municipalities, local communities, environmental NGOs, waste management companies, and businesses involved in waste management and circular economy initiatives.

Advantages and innovations

- Advanced AI Models: The service utilizes state-of-the-art proprietary AI models developed by the company's R&D team, ensuring cutting-edge performance in dumping detection.
- High Precision: The service a precision rate of 98%, ensuring accurate detection and reducing false positives.
- High Recall: The service achieves an 85% recall rate, ensuring the identification of a significant portion of actual dumping occurrences.
- Remote Sensing: The use of high spatial resolution satellite imagery allows for remote monitoring of large geographical areas, minimizing the need for manual on-site inspections.
- Online Access: Clients can access detections on an online portal which enables real-time monitoring and further data analysis and reporting.
- GIS Mapping: The service provides a detailed GIS map of identified dumping locations, offers optimized roots for cleanup, facilitating targeted collection efforts.
- Environmental Impact: By identifying and addressing dumping activities, the service contributes to environmental preservation and sustainable waste management practices.
- Optimizes waste management procedures through precise and real-time dumping detection, enabling targeted cleanups and efficient resource allocation.

Technical specification or expertise sought

Stage of development

Available for demonstration

IPR Status

Secret know-how

Sustainable Development goals

• **Goal 11: Sustainable Cities and Communities**

Partner Sought

Expected role of the partner

Municipalities, local communities, environmental NGOs, companies performing outdoors cleaning, waste reuse and circular economy companies that are interested to use satellite imagery to detect dumping activities within their areas or responsibility.

Type of partnership

Type and size of the partner

Research and development cooperation agreement

Commercial agreement with technical assistance

- **SME 50 - 249**

- **SME 11-49**

- **Big company**

- **University**

- **SME <=10**

- **Other**

- **R&D Institution**

Dissemination

Technology keywords

- **01003006 - Computer Software**

- **10003006 - Waste disinfection / detoxification**

- **10004003 - Wastewater Recycling**

Market keywords

- **08004003 - Water treatment equipment and waste disposal systems**

- **02006009 - Other computer services**

- **09008002 - Water, sewerage, chemical and solid waste treatment plants**

Targeted countries

- **World**

Sector groups involved