

8<sup>TH</sup> APRIL | 2.30PM (WEST) | [JOIN US HERE](#)

## MORE (ENOUGH) IS BETTER: TOWARDS FEW-SHOT ILLEGAL LANDFILL WASTE SEGMENTATION

Image segmentation for detecting illegal landfill waste in aerial images is essential for environmental crime monitoring. Despite advancements in segmentation models, the primary challenge in this domain is the lack of annotated data due to the unknown locations of illegal waste disposals. This work mainly focuses on evaluating segmentation models for identifying individual illegal landfill waste segments using limited annotations. This research seeks to lay the groundwork for a comprehensive model evaluation to contribute to environmental crime monitoring and sustainability efforts by proposing to harness the combination of agnostic segmentation and supervised classification approaches. We mainly explore different metrics and combinations to better understand how to measure the quality of this applied segmentation problem.

### SPEAKER

**BRUNO VELOSO** | FEP - UNIVERSITY OF PORTO &  
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Bruno Veloso is an assistant professor at Faculty of Economics - University of Porto, Portugal, and a Senior Researcher at LIAAD - INESC TEC (Laboratory of Artificial Intelligence and Decision Support).

He develops scientific research in Artificial Intelligence, which involves Multiagent Systems and Machine Learning. Bruno has authored over 80 publications in peer-reviewed international journals, book chapters and conference proceedings.

During the last years, he has served as an expert/reviewer of several conferences and journals, and he was associate editor of two journals.