

SHIELD

SAFEGUARD HERITAGE IN ENDANGERED LOOTED DISTRICTS

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INTRODUCTION

The Safeguard Heritage In Endangered Looted Districts (SHIELD) Project aims at designing and building an artificially intelligent Unmanned Aerial System (UAS) to patrol archaeological and heritage sites using the latest technologies in imaging techniques, live data streaming, decentralized (onboard) processing, Machine Learning, and flight data management.



EXPECTED RESULTS

The final goals are represented by the identification of looting activities in real-time, the collection of data for monitoring purposes on the medium and long-term period and the creation of a deterrence strategy to target specific criminal behavior. According to the needs of public authority, the **SHIELD** system can be easily relocated overcoming issues related to distances coverage, support for efficient in situ maintenance and fail-safe operation.



METHODOLOGY

The customized surveillance device is expected to be autonomously deployed from a ground station (helipad) where the drone will be (i) stored, (ii) able to take off for scheduled missions during day and night time, (iii) land, (iv) automatically recharge and (v) download the data collected during the survey.

