# Landmark Challenge Project Proposal

Laboratorio di Architteture Software e Sicurezza Informatica

Luca Ferrera, Daniele Paliotta, Daniele Cappuccio

#### 1 Abstract

The main goal of our platform is to add fun and challenges to travels and journies.

Users have access to the map of the city they are visiting, with monuments and landmarks highlighted.

When a user visits a certain monument or landmark, they can take a picture of it, and our machine learning model will recognize the monument (to confirm that is was actually visited by the user).

Users are thus challenged to visit as many interesting places as possible.

They can set goals, be involved in challenges, and even challenge other users.

#### 2 Data

- Users data (name, email, bio etc.).
- Information about landmarks/monuments.
- Data/Statistics about landmarks/monuments visited.

#### 3 User functionalities

- Authentication (Local/OAuth).
- AI Landmark recognition/classification from pictures

- Users are challenged to visit as many landmarks/monuments as possible in a given city.
- Discover and learn about monuments and landmarks.

### 4 Interactions with external services

- Google OAuth for authentication.
- Google Maps API / Mapbox.
- Public API for landmarks/monuments data (coordinates etc.).

## 5 User roles

- Administrator: can handle data and take actions on users.
- Registered user: owns a profile, can upload pictures for landmark/monument recognition, can set goals and challenges and track progress.
- Anonymous user: can only see maps with landmarks/monuments. It can only interact passively, and they do not own a profile.