

Geolocation Tools Cheat Sheet

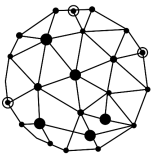
To assist researchers in navigating the complex landscape of geolocating locations, we have compiled a Geolocation Tools Cheat Sheet. This handout lists essential geolocation tools, detailing their functions and practical applications.

Mapping and Satellite Imagery

- Google Earth
 - Function: Provides detailed satellite imagery, maps, and terrain.
 - Usage: View current and historical satellite images, measure distances, and explore 3D buildings.
- OpenStreetMap (OSM)
 - Function: A collaborative project to create a free editable map of the world.
 - Usage: Access detailed maps that can be edited and used for various geolocation tasks.
- GPS Jam Map (<https://gpsjam.org/>)
 - Function: The map uses data provided by ADS-B Exchange to generate maps of likely GPS interference, based on aircraft reports of their navigation system accuracy.
 - Usage: View historical data of GPS interference.
- NASA FIRMS
 - Function: The Fire Information for Resource Management System (FIRMS) distributes Near Real-Time active fire data from the Moderate Resolution Imaging Spectroradiometer (MODIS), and the Visible Infrared Imaging Radiometer Suite (VIIRS).
 - Usage: Explore high-resolution satellite imagery and use various mapping tools.

Image and Video Analysis

- EXIF.tools
 - Function: Extract and analyze metadata from images.
 - Usage: Upload images to view metadata such as GPS coordinates, camera settings, and timestamps.
- InVID & WeVerify
 - Function: Video verification toolset for analyzing the authenticity of videos.
 - Usage: Extract keyframes, perform reverse image searches, and check video metadata.



- Google Reverse Image Search
 - Function: Find similar images on the web.
 - Usage: Upload an image or paste its URL to discover visually similar images and identify locations.
- TinEye
 - Function: Reverse image search engine.
 - Usage: Upload an image to find where it appears online and track its usage over time.

Social Media and Crowdsourcing

- GeoConfirmed
 - Function: A community platform for geolocation verification.
 - Usage: Collaborate with other geolocation experts to verify and confirm locations.

Specialized Tools

- Wikimapia
 - Function: Combines Google Maps with a wiki system.
 - Usage: View user-contributed information about various locations and landmarks.
- Suncalc.org
 - Function: Visualizes the path of the sun and sunlight phases.
 - Usage: Use for analyzing shadows and sunlight in photos to estimate time and location.
- EXIF Spy
 - Function: Analyzes image metadata.
 - Usage: Extract GPS coordinates and other metadata from photos for geolocation purposes.
- Street View Download 360
 - Function: Download Google Street View images.
 - Usage: Capture and save 360-degree images from Google Street View for offline analysis.