

Decoding Spatial Intelligence: Extraction and Analysis from Google Maps

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Abstract: *As the demand for location-based services and geospatial intelligence grows, Google Maps has emerged as a critical platform for accessing real-time geographic data. This paper examines the methods and strategies used to extract information from Google Maps, with a particular emphasis on retrieving location-specific details such as coordinates, points of interest, business information, and traffic patterns. We explore the functionalities of various Google Maps APIs, including the Places API, Routes API, and Geocoding API, to demonstrate effective techniques for geospatial data extraction and processing. Additionally, the paper addresses ethical considerations and the challenges associated with automated data collection, such as privacy issues and data reliability. Through practical case studies and experimental analyses, we showcase how extracted data can support fields like urban development, transportation planning, and market intelligence. Finally, we propose a structured framework to enhance data extraction practices while adhering to Google's terms of service and upholding privacy standards*

Keywords: Data Extraction, Maps Data Visualization, Geospatial Data Analysis

