IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 6, June 2025
Impact Factor: 7.67

Google Trends: The Peak Analyzer

Pawan Ingle, Aboli Galat, Kalash Shar, Ganesh Sonune, Prof. Raj Dahiwade
Department of Computer Engineering
Government College of Engineering, Yavatamal, Maharashtra, India

Abstract: *The evolving digital landscape has led to increased reliance on real-time data analytics, with Google Trends serving as a crucial tool for identifying emerging patterns across various domains. However, detecting significant peaks in trend data remains a challenge due to noise, seasonal variations, and data fluctuations. This research introduces an advanced peak detection algorithm tailored for Google Trends analysis, enabling the identification of meaningful trend surges with high accuracy. The proposed method leverages statistical modeling and signal processing techniques to filter irrelevant fluctuations while preserving critical insights. Our approach ensures reliable detection of trend spikes, making it particularly useful for market analysis, public interest monitoring, and event forecasting. Experimental results demonstrate the robustness of our algorithm in capturing trend peaks with minimal false positives, offering a significant improvement over conventional methods. This paper also explores various trend analysis techniques, their effectiveness.*

Keywords: Google Trends, Peak Detection, Time Series Analysis, Data Analytics

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/568