ID 98

Advancements in Location-Based Job Search Platforms: Integrating Natural Language Processing, Intelligent Agents, and Geolocation Technologies for Enhanced User Experience

UGD Prabodha[1#] and MKP Madushanka[2]

[1,2]Department of Computer Science, Faculty of Computing, General Sir John Kotelawala Defence University

[#]39-bse-6391@kdu.ac.lk

Abstract

The increasing complexity of job searching, particularly for part-time positions, presents significant challenges for job seekers, including the need for localized job listings and timely notifications. This study addresses these issues by developing a Location-Based Part-Time Job Search Platform that integrates geolocation technologies, intelligent agents, and Natural Language Processing (NLP) to enhance the job search experience. The rationale for this research is based on the growing demand for efficient job matching systems that cater to user preferences and market dynamics. The platform should consist with Google Maps API for visualizing job opportunities, real-time notifications for job listings, and personalized job recommendations based on user profiles and preferences. Preliminary results indicate that the platform significantly improves user satisfaction and engagement by providing tailored job matches and reducing search times. The implications of this research extend to the fields of human-computer interaction and employment services, contributing to a deeper understanding of how technology can facilitate job searching in a dynamic market. Ultimately, this study highlights the potential for future enhancements, including addressing privacy concerns and improving data management, to further optimize the platform's effectiveness.

Keywords: *Location-Based Services, Part-Time Job Search, Geolocation, Google Maps API, Natural Language Processing*