

## Sample of Level 3

Field of research: Linguistics and Information Management

## Geographic Information Retrieval and <u>Text</u> Mining on Chinese Tourism Webpage<u>s</u>

## 1. Introduction

The state of the Internet is characterized has by an abundance of information and data that has and become one of the most significant resources of message for the majority of people ion theirin our daily lives. Such These resources contain an enormous amount of facts or data, the retrieval of which depends mostly on the webpage search engines, in order to effectively retrieve and search for the find a suitable answer to the an inquiry. However, most of this knowledge comprises of not onlyeither non-structured data or but also-semi-structured data (Mitra et al. 2003), but also and at the pres<del>curr</del>ent moment, the ability of regular search engines is only limited to the retrieval ofn the basic keywords, instead of the rather than analysis ofn the subject matter and content and topic of the webpage itself; this application then, is yet-still far from perfection. Owing to For the reasons mentioned above, there are manymuch researches on efficient message and data extraction hasve been applied conducted focussed on into to the topic on the effective management ing these of facts and data., effectively while associated with efficient carrying out the message and data extraction. efficiently.

From these This research has resulted in es, there are many developments ion information retrieval and data mining strategiekills., Hhowever, these strategiekills are mostly aimeding at the semantic data only. Based on a recent estimation, there are about twenty percent of web-users browse in their einquirie fors based on spatial context, such as searchlooking for restaurants, theatres or , academic institutions; in addition, eighty percent of thoese web-users are typeing their queries in services with amore location orientation based services (Kornai 2001; Souza, 2005),

**Comment [SM1]:** CHECK: Some people make a clear distinction between these two terms, which might be very relevant to your theme. Considering furnishing a contrasting definition of the two terms unless they are already very clearly used and recognized within your discipline.

**Comment [SM2]:** CHECK: Again, what is your distinction between "facts" and "data". It would be an option simply to leave out "factors or"... such as searchlooking for New York delicacies or hostels in Portland, and so on.etc. However, they are hindered not only by the current state of development of the search engine's ability, but also by the limitations imposed by <u>on the differences between written English</u> and Chinese. Because , considering that it is not possible to put a space between written Chinese characters, this, has easily caused a-perplexities in relation to y within the word segmentation. Therefore, <u>Fas for the regular search engines therefore this</u>, it is quite a barrier to effectively indexing the web-content written in the Chinese written language. For example, if the user is browsing for "Portland 民宿" [read as 'min su'], which this means hostels in Portland; the regular search engine might only perform some search on either Portland or on 民宿\_-separately from their database. This, however this inquiry is therefore lacksing thematic and spatial context, and this which creates a big gap between the demand and supply of the query (Buyukkokten 1999).

Al<u>though thebeit</u> Geographic Information System (GIS) has <u>the</u> the capability <u>of to</u> handle ing the geographic data, however the access <u>to of the</u> spatial data is mostly limited to <u>spatial</u> coordinates created by <u>the geometricy</u> space expressions. Generally, people express their knowledge <u>in of geographic locations</u> by using spatial contenxt such as place names, labels, addresses or even telephone numbers, instead of using geometric coordinates <u>as it is being used</u> in the GIS (Jones 2001). The content of a webpage is a concrete example of this phenomenon, where people express <u>their</u> location data in a spatial context. <u>Band by</u> using this <u>implicit spatial data</u>, the connection between webpages and any particular location can be established. Even though <u>Web GIS is presently available</u>, at the moment, the present of Web GIS is there, however it is quite difficult to combine <u>GIS</u> the analysis <u>ability</u> of GIS and text analysis, since its the former's usability does not surpass the traditional GIS.

**Comment [SM3]:** CHECK: While this is grammatical, it is not especially clear. I suggest you enlarge on what you mean here.

**Comment [SM4]:** CHECK: Again, why is the data "implicit"? explain this

**Comment [SM5]:** CHECK: I have assumed here that you mean Web GIS doesn't surpass the regualr form, but it could have been read to mean that text analysis doesn't