公民回報災害訊息綜整研判技術

Citizen Reporting: Disaster Integrating and Analysis Technology

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摘要

在科技的發展下帶動民眾不同的生活使用習慣,傳統的通訊方式藉由電話、電視與廣播進行資訊的散佈,而資訊科技發展下形成目前最大的資訊傳遞管道與環境,即是社群網路傳播管道。現今民眾利用社群網路服務,於災害發生當下傳遞各類型的災害訊息,有效的將現場第一時間的災害訊息傳遞出來。另外,在社群環境上有更積極參與的社群網路公民,於 2016 尼伯特颱風期間,自行建立災害訊息回報地圖,讓參與社群網路公民能快速的蒐整相關災害訊息,這樣的公民參與防災的力量,應要有效地納入中央災害應變中心,作為政府應變期間,蒐整災害訊息資訊的來源之一。

為有效蒐集社群網路資料來源,蒐集熱門社群網站來源為優先處理的任務,從過去 社群網路公民參與的軌跡,找出最多使用者的社群網路服務,利用網路攀爬技術來蒐整 相關的社群網路,目前共建構 19 各主要來源,213 各來源頻道。之後透過文本分析技術 擷取公民提供的災害訊息,導入中心應變作業流程,支援中央災害應變中心之災害訊息 蒐整作業。

關鍵詞:社群網路、災情綜整、應變作業

Abstract

Driven by the development of technology, people change their lifestyles. Traditional methods of communication are usually telephone, television and radio. The development of information technology has built the largest channel to deliver messages in the social network. Now, people deliver all kinds of disaster-related messages during disaster by social network. This work can be done at the first time when any disaster event occurred. In addition, there were some active users in the social network creating disaster message reporting map when typhoon Nepartak hit Taiwan in 2016. This map can make users collect messages quickly. We consider the power of netizens participating information delivery, should be one of the source of gathering information by Central Emergency Operation Center (CEOC) during response phase.

In order to effectively collect social network information, the first task is to collect popular social channels. According to the record of netizens participating message delivery, we can find popular social websites or forums. Through the crawling technic, we have built 19 major websites, including 213 channels. After that, any useful messages should be converted to disaster information by text mining. This approach is an important task supporting CEOC to integrate situation.

Keywords: Social network \(\) situation integration \(\) response phase