DEH – An Interactive Mobile Navigation Service for Demodulating and Encoding Heritage

Chung-Ming Huang, Ming-Sian Lin and Shang-Chun Lu
Lab. of Multimedia Mobile Networking,
Dept. of Computer Science and Information Engineering,
National Cheng Kung University,
Tainan, Taiwan, R.O.C.
Correspondence:huangcm@locust.csie.ncku.edu.tw

Abstract

Cultural and historical heritage preservation was deployed in the world but lacking creative applications to take humanistic knowledge into human life. Demodulating and Encoding Heritage (DEH) project attempts to construct a creative service which is focus on humanistic attractions navigation and guidance. DEH project designs an architecture with features of humanistic content automatically reinforcement. Based on this architecture, humanistic contents are able to improve via data mining and users' experience sharing. In this project, humanistic-POI navigation system is proposed to lead travelers experiencing context of historical and cultural POI. The multimedia geo-blog proposed a space of touring experience sharing and itineraries reference. In order to fulfill the humanistic content utilization, DEH project designed a well-defined metadata scheme for POI content interpretation and an open cross-platform interface for various applications access. An inference engine supported real-time recommendations of suitable POI and itineraries navigation according to user's situation and preference settings. Through these services, humanistic-content will be preserved and popularized into human life and achieves the objective of humanist education and popularization.

Keywords: LBS, Humanistic creative service, navigation system, cultural heritage