Ontology for a Voice Transcription of OpenStreetMap Data: The Case of Space Apprehension by Visually Impaired Persons

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Abstract : In this paper, we present a vocal ontology of OpenStreetMap data for the apprehension of space by visually impaired people. Indeed, the platform based on produsage gives a freedom to data producers to choose the descriptors of geocoded locations. Unfortunately, this freedom, called also folksonomy leads to complicate subsequent searches of data. We try to solve this issue in a simple but usable method to extract data from OSM databases in order to send them to visually impaired people using Text To Speech technology. We focus on how to help people suffering from visual disability to plan their itinerary, to comprehend a map by querying computer and getting information about surrounding environment in a mono-modal human-computer dialogue.