INNOVATION DESIGNING INTELLIGENT TREKKING POLES BASED ON BIG DATA GIS

Mengyuan Chen, Zixian Huang, Zhuo Zeng, Xiuwen Chen & Ruei-Yuan Wang*

Research Scholar, Guangdong University of Petrochem Technology, Sch Sci, Maoming 525000, Peoples R China

ABSTRACT

With the expansion of the hiking leisure and tourism market, the demand for intelligent outdoor equipment has increased accordingly, and the application prospect of Trekking Poles is infinitely broad. This study focuses on the design of intelligent Trekking Poles, besides, based on optimizing the structure and functions of the existing Trekking Poles on the market, it also combines the reasoning advantages of Big Data Geographic Information System (BD-GIS) and AI to assist climbers who can easily obtain spatial geographic information. Which are used for travel planning, safety factor analysis, problem decision-making by mastering intelligent management of Big Data, and convey it to users for a safer and more convenient outdoor experience. It has significant practical prospects for users' safety, comfort, and outdoor activity experience, and it will become one of the most important infrastructures for smart tourism.

KEYWORDS: Big Data, Geographic Information System (GIS), Artificial Intelligence (AI), Trekking Poles, Smart Tourism