

## The Twin Terminal of Pedestrian Trajectory Based on City Intelligent Model (CIM) 4.0

**Authors :** Chen Xi, Liu Xuebing, Lao Xueru, Kuan Sinman, Jiang Yike, Wang Hanwei, Yang Xiaolang, Zhou Junjie, Xie Jinpeng

**Abstract :** To further promote the development of smart cities, the microscopic "nerve endings" of the City Intelligent Model (CIM) are extended to be more sensitive. In this paper, we develop a pedestrian trajectory twin terminal based on the CIM and CNN technology. It also uses 5G networks, architectural and geoinformatics technologies, convolutional neural networks, combined with deep learning networks for human behavior recognition models, to provide empirical data such as 'pedestrian flow data and human behavioral characteristics data', and ultimately form spatial performance evaluation criteria and spatial performance warning systems, to make the empirical data accurate and intelligent for prediction and decision making.

**Keywords :** urban planning, urban governance, CIM, artificial intelligence, sustainable development

**Conference Title :** ICSUD 2023 : International Conference on Smart Urbanism and Design

**Conference Location :** Paris, France

**Conference Dates :** August 24-25, 2023