

The Urban Stray Animal Identification Management System Based on YOLOv5

Authors : Chen Xi, LIU Xuebin, Kuan Sinman, LI Haofeng, Huang Hongming, Zeng Chengyu, Lao Xuerui

Abstract : Stray animals are on the rise in mainland China's cities. There are legal reasons for this, namely the lack of protection for domestic pets in mainland China, where only wildlife protection laws exist. At a social level, the ease with which families adopt pets and the lack of a social view of animal nature have led to the frequent abandonment and loss of stray animals. If left unmanaged, conflicts between humans and stray animals can also increase. This project provides an inexpensive and widely applicable management tool for urban management by collecting videos and pictures of stray animals captured by surveillance or transmitted by humans and using artificial intelligence technology (mainly using YOLOv5 recognition technology) and recording and managing them in a database.

Keywords : urban planning, urban governance, artificial intelligence, convolutional neural network, machine vision

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

Conference Location : Paris, France

Conference Dates : August 24-25, 2023