INFORMATICS INSTITUTE OF TECHNOLOGY

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AutoTMvision: Automating Trademark Similarity Detection Using Computer Vision

A Project Specifications Design and Prototype by

Mr Jayamal Hettiarachchi

Supervised by

Mrs Jayani Harischanra

Submitted in partial fulfilment of the requirements for the BEng/BSc/MSc in Software Engineering degree at the University of Westminster.

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ABSTRACT

Due to the large scale of registered trademark data, the similar mark search has become time-consuming and challenging. A similar mark search is an essential process that helps to avoid trademark infringement incidents. However similar mark search is a crucial process, there are major throwbacks in the existing workflow such as less accuracy, high time consumption and inefficiency. AutoTMvision uses a pre-trained Convolutional Neural Network (CNN) architecture to analyse a large set of trademark images and extract feature vectors for each of every trademark image. The main task will be that of "similar trademark search," which refers to searching for the most similar set of trademark images to some query trademark image. The results of the experiments reveal that the proposed method is substantially better and more accurate than standard trademark retrieval methods and is more efficient and timesaving.

Keywords - Trademark Information Retrieval, CNN, Computer Vision, Image processing, Trademark Management System