

BONAFIDE CERTIFICATE

Certified that this report titled “**IPrivacy: IMAGE PRIVACY PROTECTION**” is the bona fide work of **Mrs. ASNATH K (REG NO: 15130382)** who carried out the seminar under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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ABSTRACT

Even major social websites like Facebook can allow users to manually specify their coarse-grained privacy settings, more and more privacy concerns still raise for social image sharing. The reason is that it may not be easy for common users to correctly configure their privacy preferences manually due to both the lack of privacy knowledge and the huge time consuming. To automate such privacy setting process for social image sharing, a new approach called iPrivacy.

It is developed in this paper: massive social images and their privacy settings are leveraged to learn the object-privacy relatedness effectively and identify a large set of privacy-sensitive object classes automatically, a hierarchical deep multi-task learning algorithm is developed to jointly learn more representative deep CNNs (convolutional neural networks) and more discriminative tree classifier over a visual tree, so that we can achieve fast and accurate detection of large numbers of privacy-sensitive object classes, automatic recommendation of privacy settings for image sharing can be achieved by detecting the underlying privacy-sensitive objects from the images being shared, recognizing their classes, and identifying their privacy settings and one simple solution for image privacy protection is provided by blurring the privacy-sensitive objects automatically. We have conducted extensive experimental studies on real-world images and the results have demonstrated both efficiency and effectiveness of our proposed approach.

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LIST OF ABBREVIATIONS

iPrivacy	-	image Privacy
CNN	-	Convolutional Neural Networks
RGB	-	Red Green Blue
COD	-	Cascade Object Detector
NN	-	Neural Network

