

A SYSTEM, METHOD AND COMPUTER READABLE MEDIUM FOR TRAINING A CONVOLUTIONAL NEURAL NETWORK TO AUTOMATICALLY VERIFY A HOLOGRAM

ABSTRACT

A system, method and computer readable medium for training a Convolutional Neural Network (CNN) to automatically verify a hologram of an Identity (ID) document is disclosed. A set of images of an original ID document and a set of images of a high quality printout of the ID document are captured at different angles using an imaging unit. An image processing unit is used for processing the set of images of the original ID document to generate an absolute value differencing image, which forms a first set of training data. The set of images of the high quality printouts is used to generate another absolute value differencing image, which forms a second set of training data. The CNN is trained using the first and second set of training data. After training, the CNN is capable of verifying whether a valid hologram is present in a test ID document or not.

FIG. 1 accompanies the abstract.