

PERSON RE-IDENTIFICATION USING ITERATIVE LEARNING

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ABSTRACT:

In the previous papers expose that Person re-identification could have achieved partially. They concluded that, the identification of person using object. Re-identification technology using supervised algorithm, it cannot give the accurate result for identify the person .To overcome this issue, by using iterative learning algorithm of machine learning to produce the accurate result by repeating process like as prototype model . This chapter combines theory and practice to explain why the deep network can re-identify the person.

KEYWORDS:

Image, Deep Learning, Convolution Neural Network, Iterative.

INTRODUCTION:

Person re-identification is one of the technology that uses computer vision technology to identify whether there is a specific person in the image or video sequence. It is widely regarded as a sub-problem of image retrieval. Given a monitor person image, retrieve the image of the row of individuals across the device.

It aims to form up for the visual limitations of the present fixed cameras, and may be combined with person detection and pedestrian tracking technology, which may be widely used in intelligent video monitoring, intelligent security and other fields. These are handled in repeating way, we get the result which again passed as a input and re-evaluate the pictorial data, test it again after completed the processed which sends the accurate result.

ITERATION LEARNING:

A pre-process training dataset collection is first introduced into the model. After completing the processing and model building with the given data, the model is tested, and then the results are matched with the specific result/expected output. The feedback is then returned back to the system for the algorithm to further learn and fine tune its results.

ARCHITECTURE OF PERSON RE-IDENTIFICATION:

This architecture of person re-identification model diagram describes that in the first stage ,the data can be taken as a pre-process input (image and video clips) data into the pre-process model, then it has processes by using deep neural network and evaluated data based on the feature after it has sent into the another stage to extract the features of the image.

After completion of pre-processing testing the result will be passed to the iterative model their again the process are repeated until find the accurate result. Finally the output will become the expect result.

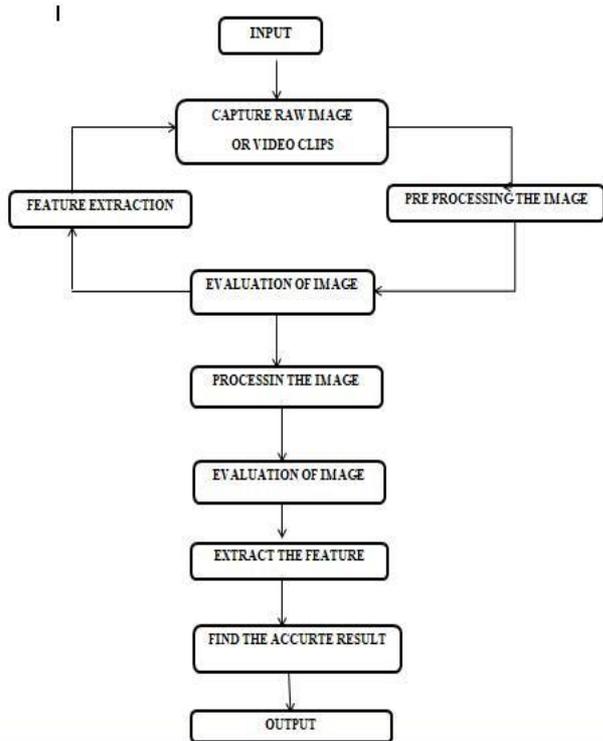


fig 1:- Architecture of person identification

Data process by using deep convolutional neural network:

Artificial neural networks are highly accurate in simulating data models mainly due to their iterative process of learning. But this process is different from the one we explored earlier for enhancing algorithms. Here the method is seamless and natural and during a way it paves the way for reinforcement learning in AI systems. The image can be processing by using deep neural networks. Every network has an input and output node and in-between

hidden layers that contain algorithms. The input node is given the initial data set to perform a group of actions and every iteration creates a result that's output as a string of knowledge. This output is then matched with the particular result dataset and therefore the error is then fed back to the input node. This error then enables the algorithms to correct themselves and reach closer and closer to the particular dataset. This process is named training the Neural Networks and every iteration improves the accuracy. The key difference between the iteration performed here as compared to how it's performed by Boosting algorithms is that here we don't need to update the classifiers manually, the algorithms change themselves supported the error feedback.

Conclusion:

Iteration is used to create the smarter artificial systems in the near future. The enormous memory requirements for performing multiple iterations on complex data sets continue to pose major challenges. Using iterative learning algorithm we can our goal with the expected result as well as actual result.

References:

1. Hyun-Sik Ahn, Soo-Hyung Lee, And Do-Hyun Kim. Frequency-Domain Design Of IterativeLearningControllersFor Feedback Systems. In IEEE International Symposium On Industrial

- Electronics, Volume 1, Pages 352–357, Athens, Greece, July 1995. Google Scholar
2. J. Albus. Outline For A Theory Of Intelligence. IEEE Transactions On Systems, Man, And Cybernetics, 21(3):473–509, May/June 1991. Mathscinetgoogle Scholar.
 3. David M. Alter And Tsu-Chin Tsao. Two-Dimensional Exact Model Matching With Application To Repetitive Control. Journal Of Dynamic Systems, Measurement, And Control, 116:2–9, March 1994. Zbmathgoogle Scholar
 4. N. Amann And D. H. Owens. Non-Minimum Phase Plants In Iterative Learning Control. In Second International Conference On Intelligent Systems Engineering, Pages 107–112, Hamburg Harburg, Germany, September 1994. Google Scholar
 5. N. Amann And D. H. Owens. Iterative Learning Control For Discrete Time Systems Using Optimal Feedback And Feedforward Actions. In Proceedings Of The 34th Conference On Decision And Control, New Orleans, LA, July 1995. Google Scholar

6. N. Amann, D. H. Owens, And E. Rogers. 2D Systems Theory Applied To Learning Control Systems. In Proceedings Of The 33rd Conference On Decision And Control, Lake Buena Vista, FL, December 1994. Google Scholar

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