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| **jAgeRestriction** | | | |
| ***What this do*** | | | |
| Calling up a video file, it detects the position of the face using a model trained through SSD algorithm in digital images of frame units that are entered continuously. Based on the location information of the detected face, the image is cropped to deduce the age and gender of the face belonging to the image using a model learned only from CNN. The estimated age value is determined and printed after determining that the parsed value is finally outputting the image based on the threshold. In particular, it improved speed in the process of the reading models from outside the for loop and recognizing faces from the MTES through jLoadModel function. | | | |
| ***Preparation for run*** | | | |
| * **Set the number of iterations for loop to the desired size.** * **Add the JoModelReader class to the corresponding KScOpenCvUtils header file.**   **// JoModelReader**  **class JoModelReader {**  **private:**  **int typeID;**  **public:**  **void InitializeID() { typeID = 2014104152; }**  **bool RightDataType() { return (typeID == 2014104152); }**  **int GetTypeID() { return typeID; }**  **void Release() {}**  **cv::dnn::Net face\_Model;**  **cv::dnn::Net gender\_Model;**  **cv::dnn::Net age\_Model;**   * **Download model gender net:**   **(**[https://www.dropbox.com/s/iyv483wz7ztr9gh/gender\_net.caffemodel?dl=0"](https://www.dropbox.com/s/iyv483wz7ztr9gh/gender_net.caffemodel?dl=0%22))   * Download model age net:   **(**[https://www.dropbox.com/s/xfb20y596869vbb/age\_net.caffemodel?dl=0"](https://www.dropbox.com/s/xfb20y596869vbb/age_net.caffemodel?dl=0%22)) | | | |
| * Modify the path where the model is located in the jLoadModel. | | | |
| ***Input need during execution*** | | | |
| * **A face-recognizable frame image shall exist in the digital image entered. If the face does not exist, extract the message box and return to the first iterator of the for loop and loop again.** | | | |
| ***What needs to be improved*** | | | |
| * **Even when you derive false from the return value of a jFaceAnalysis function, the for loop must continue to be turned back.** | | | |
| ***Functions Used*** | | | |
| * **cvVidFileOpen: Read file in “\*.avi” and “\*.mp4” formats.** * **jLoadModel: Face recognition, age and gender inference models are read through the opencv function.** * **cvVidcapGrab: Outputs frame buffer for video files in mat type.** * **jFaceAnalysis: Recognize face in input image and parse age and gender to output in mat type and int type.** * **jAgeChecker: It receives parsed age and input images and outputs either the original image or limited age image based on the threshold.** * **cvDisplayImg: Display mat type on screen.** * **cvVidcapRelease: Release the entered image frame buffer.** | | | |
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| ***#*** | ***Modification*** | ***by*** | ***Date*** |
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