

# Removing individuals from video streams through facial recognition

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At the current moment, with the accelerated development of video streaming systems due to the pandemic context, more and more people have been forced to transition to the online environment in order to continue their previous routines. To minimize the feeling of being online, most meetings (e.g., sessions, courses, labs) were conducted with the camera turned on. To maintain a level of privacy, streaming platforms provide virtual backgrounds, but they only cover static objects, not people. In this article, we propose a solution where only the reference person remains in the frame while the other concurrent participants are removed from the frame, while still maintaining the virtual background. Through the proposed solution, which integrates a series of image processing algorithms that support the process of detecting people in the video stream and identifying the main speaker, we bring an added level of privacy for participants in video meetings.

Keywords: facial recognition, removing individuals from videostream

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