

Enhancement in Aviation Security using Human Pose Recognition: A Review

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Abstract. Aviation security complies with the procedures and tactics used to protect passengers, crew members, aircraft, and airport property from injury, criminal activity, terrorism, and other threats. It is a system of policies, processes, personnel, and material resources aimed at preventing illegal interference with civil aviation. Terrorism, sabotage, threats to life and property, false threat communication, bombing, and other forms of unlawful interference are instances of unlawful interference. A vast number of people pass through airports every day. Because of the high number of people gathered in one place, terrorism and other forms of criminality are prospective targets. As a result, a strong security system should be in place to ensure the survival and safety of air transportation. From the point of ground handling through taking off in the plane, everything should be done in a secure environment free of illegitimate and criminal influence. Furthermore, the relevant authorities should solidify and assure every detail of the passengers and flights, as well as the behaviours of the passengers even within the airports from the point they enter the airport to the point where they leave the airport and get into the flight. So deviating from the currently existing methods this proposing system suggest a method as an advancement in the aviation security using human pose and behaviour recognition using set of RGB-D cameras fastened within the targeted, defined premises with deep learning, convolutional neural networking and 3D image capturing techniques.

Keywords: *Aviation industry, Deep learning, RGB-D image processing, CNN, Human pose recognition*