



UNIVERSITI
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Cawangan Melaka

i-JAMCSIIX 2022

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

ABSTRACT BOOK

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In Partnership:



Tadulak● University

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i-JaMCSIIX **2022**

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

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i-JaMCSIIX

Universiti Teknologi MARA Cawangan Melaka Kampus Jasin

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Dashcam with cloud storage using raspberry pi with FFmpeg video compression

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JM023 – Innovation – Local – Category C: Students - UiTM Melaka

Abstract—Dashcams are becoming more popular in-vehicle equipment for recording audio and video footage during automobile trips and modern dashcam has started to increase the resolution of the video pixel from 480p to 1080p and now up to 4K. But increase resolution leads to increase of storage usage. There are also some problems with the corrupted files of the recorded video due to the SD card problem. This project focuses on designing and developing a dashcam using raspberry pi that compresses the recorded video first before storing it to the cloud storage and to test the efficiency of the FFmpeg compression in reducing the size of the video which will counter the problem on the storage limitation and file corruption on the dashcam with the help of cloud storage while also giving the user the ability to access the recorded video from anywhere. The result of the efficiency of the FFmpeg video compression is great as the compression successfully reduces the size of the video which saves a lot of storage space and shorten the time taken for the upload to finish. This project can be improved in the future with the use of much powerful system on a chip device to increase the speed of the compression and also with the use of 64-bit operating system compared to the 32-bit operating system to remove the limitation on the ram.

Keywords—Dashcam, Cloud Storage, FFmpeg video compression