VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI

A PROJECT REPORT ON

"IMAGE COMPRESSION ON HETERGENEOUS IMAGES USING CONVOLUTIONAL NEURAL NETWORKS"

Submitted in partial fulfillment for the award of Degree of,

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

By

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CERTIFICATE

This is to certify that the project entitled **"IMAGE COMPRESSION ON HETERGENEOUS IMAGES USING CONVOLUTIONAL NEURAL NETWORKS"** has been successfully completed by

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the bonafide students of **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2019–2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Data compression has always been a key concern during transmission. Interests on image processing has been increased enormously from last decades. As a result, different compression techniques have been introduced and purposed. Lossy image compression algorithms are used widely where some information gets lost during compression resulting high compression. However, we pay for their high compression rate with visual artifacts degrading the user experience. Deep convolutional neural networks (CNN) have become a widely used tool to address computer vision tasks very successfully.