Vehicle Make & Model Recognition

by Zhihao DAI

COP507 Computer Vision & Embedded Systems Coursework Report

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Abstract

In this coursework, I implement a JPEG Image Compression Simulation using MATLAB as frontend GUI and Python as backend JPEG CODEC. There are 2 simulation parameters K and Q' in the application. Several specific design considerations are introduced to the implementation, inclding an end-to-end MATLAB interface, an "Video Compression" functionality and DCT as Matrix Computation. I conclude that both K and Q' can significantly affect the quality of the compressed image.

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System Design

- 2.1 Assumptions
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Experiments and Results

Environment, etc.

- 3.1 Pre-processing
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Convolution Neural Network Model

- 4.1 Architecture
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Discussion

- 5.1 Conclusions
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References

Appendix A

Source Code