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ABSTRACT

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DEPARTMENT OF COMPUTER SCIENCE FACULTY OF APPLIED SCIENCES

**A HYBRID LOSSLESS DATA COMPRESSOR USING THE LEMPEL-ZIV-WELCH
ALGORITHM AS BACKBONE**

BY

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ABSTRACT

With the ever rapid increase of data and the need to reduce transmission costs, lossless data compressors are being developed for a new class of data or to improve on existing compressors albeit with small improvements. These are great achievements given the economical impact it can have on data transmission and storage. This dissertation aims to improve on one of the compressors the Lempel-Ziv-Welch compressor by adding a redundancy reduction technique, the run-length encoding and a secondary compression technique which uses Huffman codes.

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