

Exercise: Lossless Image Compression Challenge (Part II)

Improve your codec for lossless coding of 8-bit color images

- Try different things discussed in lectures and exercises

The following might be worth trying

- Prediction
 - Simple prediction using left sample
 - Fixed non-linear predictor like LOCO or Paeth predictor
 - Line- or block-adaptive selection of predictor (e.g., between horizontal, vertical, ...)
- Entropy Coding of Prediction Errors
 - Simple Rice codes (may be with adaptive Rice parameter)
 - Arithmetic coding with adaptive marginal pmf
 - Arithmetic coding with conditional pmf (very simple conditions)

Measure and provide the compressed file sizes for the Kodak test set!