

# **Possible Topics for CMPT 365 Term Project**

*(You are encouraged to create your own)*

1. Educational or Recreational Websites
  - 1) Kids learning materials and games
  - 2) Tourist guide book
  - 3) Cookbook, Gold Fish, Equestrian, ...
2. Lossless Compression

Adaptive Huffman, Arithmetic coding, etc.
3. Interactive JPEG
  - 1) Hierarchical mode
  - 2) Compression ratio, efficiency, etc.
  - 3) Analysis and visualization (animation, video, etc.)
4. MPEG or H.264 codec

Implement an interactive video encoder and decoder and possibly have the following features:

  - 1) Logarithmic or hierarchical search for motion vectors
  - 2) DCT or integer transform for the difference frames
5. Games
  - 1) Card games (Blackjack, ...), Suduko, etc.
  - 2) Action games
  - 3) Exploration of Kinect