CAPP 30123 Project Proposal

Group Name: The Da Vinci Code

Group Members: Rose Gao, Yangyang Dai, Xi Chen, Liqiang Yu

Dataset: Stanford I2V Dataset

- Link: https://exhibits.stanford.edu/data/catalog/zx935qw7203
- Size: 150 videos which are about 10 GB each, 227 images

Stanford I2V Dataset

Full version	Light version
3.8k hours	1k hours
84k video clips	23k video clips
229 query images	78 query images
14M keyframes@1fps	3.8M keyframes@1fps
2.7 minutes/clip	2.65 minutes/clip

General Goal:
Image-to-video (I2V) visual search

Specific steps:

- "Compare query signature[1] to video frames' signatures (@1fps) from entire database"
- "Evaluate performance over top 100 ranked clips"

Reference

Araujo, A., Chaves, J., Chen, D., Angst, R., & Girod, B. (2015, March). Stanford I2V: a news video dataset for query-by-image experiments. In *Proceedings of the 6th ACM Multimedia Systems Conference* (pp. 237-242). ACM.

Lowe, D. G. (2004). Distinctive image features from scale-invariant keypoints. *International journal of computer vision*, *60*(2), 91-110.

[1] Signature refers to "certain image matching techniques used in computer vision, including object or scene recognition, solving for 3D structure from multiple images, stereo correspondence, and motion tracking" (Lowe, 2004).