Projects from ACM Multimedia 2014

Objective:

The students are required to repeat a research project reported in a paper published in 2014 ACM Multimedia conference. The goal is to allow students to gain experience in multimedia research.

Project Description:

Read some of the following papers:

1. Cross-modal Retrieval with Correspondence Autoencoder:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p7-feng.pdf
2. VideoStory: A New Multimedia Embedding for Few-Example Recognition and Translation of Events:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p17-habibian.pdf
3. Exploring Principles-of-Art Features For Image Emotion Recognition:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p47-zhao.pdf
4. Dynamic Background Learning through Deep Auto-encoder Networks:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p107-xu.pdf
5. Song Recommendation for Social Singing Community:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p127-mao.pdf
6. What's Making that Sound?:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p147-li.pdf
7. Error-Driven Incremental Learning in Deep Convolutional Neural Network for Large-Scale Image Classification:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p177-xiao.pdf
8. Start from Scratch: Towards Automatically Identifying, Modeling, and Naming Visual Attributes:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p187-zhang.pdf
9. An Objective Quality of Experience (QoE) Assessment Index for Retargeted Images:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p257-zhang.pdf
10. Acceptability-based QoE Management for User-centric Mobile Video Delivery: A Field Study Evaluation:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p267-song.pdf
11. Weakly-Supervised Image Parsing via Constructing Semantic Graphs and Hypergraphs:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p277-xie.pdf
12. Scalable Visual Instance Mining with Threads of Features:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p297-zhang.pdf
13. Towards Efficient Privacy-preserving Image Feature Extraction in Cloud Computing:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p497-qin.pdf
14. Optimized Distances for Binary Code Ranking:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p517-wang.pdf
15. Rescue Tail Queries: Learning to Image Search Re-rank via Click-wise Multimodal Fusion:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p537-yang.pdf
16. Easy Samples First: Self-paced Reranking for Zero-Example Multimedia Search:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p547-jiang.pdf
17. Mining Cross-network Association for YouTube Video Promotion:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p557-yan.pdf
18. What Videos Are Similar with You? Learning a Common Attributed Representation for Video Recommendation:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p597-cui.pdf
19. Social Embedding Image Distance Learning:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2014/p617-liu.pdf

You must at least implement the basic algorithms, schemes, or systems discussed in the paper. You also need to repeat some experiments presented in the paper to validate your implementation. You are

encouraged to design new algorithms or use new approaches to solve the same problem. If you propose a new solution, you need to compare your solution with the ones presented in the paper through analytical study or experiments.

Questions and Concerns:

If you have any questions or concerns regarding this project, or if you feel any part of the project description is confusing, please talk to the instructor. Making false assumptions about the project may result in a low grade.

You are not allowed to contact the authors of these papers unless you obtain a written permission from the instructor. Any attempt of contacting the paper authors without permission of the instructor will be considered as cheating. It may result in a zero (0) in your project grade.