Projects from ACM Multimedia 2012

Objective:

The students are required to repeat a research project reported in a paper published in 2012 ACM Multimedia conference. The goal is to allow students to gain experience in multimedia research.

Project Description:

Read some of the following papers:

1. Right Buddy Makes the Difference: an Early Exploration of Social Relation Analysis in Multimedia Applications:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p19-sang.pdf
2. Propagation-Based Social-Aware Replication for Social Video Contents:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p29-wang.pdf
3. A Bag-of-Objects Retrieval Model for Web Image Search:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p49-yang.pdf
4. Harvesting Visual Concepts for Image Search with Complex Queries:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p59-nie.pdf
5. Exploiting Visual Word Co-occurrence for Image Retrieval:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p69-shi.pdf
6. MoViMash: Online Mobile Video Mashup:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p139-saini.pdf
7. Leveraging Social Network Concepts for Efficient Peer-to-Peer Live Streaming Systems:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p249-shen.pdf
8. GreenTube: Power Optimization for Mobile Video Streaming via Dynamic Cache Management:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p279-li.pdf
9. Exploratory Search of Long Surveillance Videos:
   http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p309-castanon.pdf
10. When Video Search Goes Wrong: Predicting Query Failure Using Search Engine Logs and Visual Search Results:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p319-kofler.pdf
11. Image Colorization Using Similar Images:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p369-gupta.pdf
12. Multi-View Learning from Imperfect Tagging:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p479-qi.pdf
13. Joint Statistical Analysis of Images and Keywords with Applications in Semantic Image Enhancement:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p489-lindner.pdf
14. Image Annotation by Semantic Sparse Recoding of Visual Content:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p499-lu.pdf
15. Annotating Web Images using NOVA: NOn-conVex group spArsity:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p509-wu.pdf
16. Spatial Pooling of Heterogeneous Features for Image Applications:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p539-xie.pdf
17. “Hi, Magic Closet, Tell Me What to Wear!”:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p619-liu.pdf
18. Hybrid Social Media Network:
    http://www.cs.clemson.edu/~jzwang/1501863/mm2012/p659-liu.pdf

Select the research project in one of these papers as your term project. 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 a written permission is obtained from the instructor. Any attempt of contacting the paper authors without the permission will be considered as cheating. It may result in a zero (0) in your project grade.