

## Projects from ACM Multimedia 2010

### Objective:

The students are required to repeat a research project reported in a paper published in 2010 ACM Multimedia conference. The goal is to allow students to gain experience in multimedia research.

### Project Description:

Read some of the following papers:

1. Leveraging Loosely-Tagged Images and Inter-Object Correlations for Tag Recommendation:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p5-shen.pdf>
2. Unified Tag Analysis With Multi-Edge Graph:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p25-liu.pdf>
3. Efficient Large-Scale Image Annotation by Probabilistic Collaborative Multi-Label Propagation:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p35-chen.pdf>
4. Self-Diagnostic Peer-Assisted Video Streaming through a Learning Framework:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p73-niu.pdf>
5. CO3 for Ultra-fast and Accurate Interactive Segmentation:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p93-zhao.pdf>
6. Retrieving Landmark and Non-Landmark Images from Community Photo Collections:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p153-avrithis.pdf>
7. Supervised Reranking for Web Image Search:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p183-yang.pdf>
8. iLike: Integrating Visual and Textual Features for Vertical Search:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p221-chen.pdf>
9. A New Approach to Cross-Modal Multimedia Retrieval:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p251-rasiwasia.pdf>
10. Building Contextual Visual Vocabulary for Large-scale Image Applications:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p501-zhang.pdf>
11. Real-time Large Scale Near-duplicate Web Video Retrieval:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p531-shang.pdf>
12. A High-Quality Low-Delay Remote Rendering System for 3D Video:  
<http://www.cs.clemson.edu/~jzwang/ustc11/mm2010/p601-shi.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. Any attempt of contacting the paper authors will be considered as cheating. It may result in a zero (0) in your project grade.**