Yan Liu (Resume for Internships)

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Research Interests:
Video classification and Machine learning

Experience:

08/2001 - Present	Research Assistant, Department of Computer Science, Columbia University. Working on feature selection in video classificaton for the project of adaptive interactive team video (NSF).
07/2003 - 09/2003	Internship in Intel China Software Enabling group. Worked on face animation for the project of Visual Language Tutor.
09/2000 - 12/2001	IBM Fellowship, Department of Electrical & Computer Engineering, Polytechnic University. Worked on the project of Data hiding & watermarking of video
06/1999 - 08/1999	Research Assistant, Multimedia Technology Center, Hong Kong University of Science & Technology. Worked on the project of Automatic content-based video classification and retrieval.

Awards and Certificates:
1. *Special Recognition Award*, Intel 2003.
2. *IBM Fellowship Award,* 2000.
3. *Best Paper Award*, in IASTED International Conference on Internet and Multimedia Systems and Applications, Las Vegas, U.S.A., 2000.

Education:

01/2001 – Present	PhD Student, Department of Computer Science, Columbia University, New York. GPA: 3.92/4.0
09/2000 - 12/2000	PhD Student, Department of Electrical Computer Engineering, Polytechnic University, New York. GPA: 3.67/4.0.
09/1998 - 08/2000	PhD Student, Department of Computer Science, Hong Kong University of Science & Technology, Hong Kong. GPA: 4.0/4.0.
09/1996 - 06/1998	M.S. in Industrial Economics, School of International Business, Nanjing University, China. GPA: 3.92/4.0.
09/1992 - 07/1996	B.E. in Information Engineering, Department of Information Engineering, Southeast University, China. GPA: 3.82/4.0.

Technical Skills:

Programming Languages:	C/C++, Pascal, PowerBuilder, Matlab, TeX/LaTeX.
Operating Systems:	UNIX/X Windows, Window NT/98/95/3.x, MS-DOS.
Multimedia Systems:	MPEG-1/2/4/7, H.263.

Publications:
1.Yan Liu and John R. Kender. Video Feature Selection Using Fast-converging Sort-Merge Tree. Submitted to IEEE International Conference on Multimedia & Expo, 2004.

2.Yan Liu and John R. Kender. Fast video segment retrieval by Sort-Merge feature selection, boundary refinement, and lazy evaluation. Computer Vision and Image Understanding , volume 92, Issues 2-3, November-December 2003, pp 147-175.

3.Yan Liu and John R. Kender. Video retrieval under sparse training data. CIVR 2003, pp 406- 413.

4.Yan Liu and John R. Kender. Fast scene segmentation using multi-level feature selection algorithm. IEEE International Conference on Multimedia & Expo, 2003.

5. Yan Liu and John R. Kender. Feature selection for video data. Proceedings of the Third SIAM International Conference on Data Mining, San Francisco, CA, USA, May 1-3, 2003.

6.Yan Liu and John R. Kender. Video frame categorization using Sort-Merge feature selection. In Proceedings IEEE Workshop on Motion and Video Computing, pages 72--77, 2002.

7.Yan Liu and Fei Li. Semantic extraction and semantics-based annotation and retrieval for video databases. International Journal of Multimedia Tools and Applications, pages 5-20,2002.

8.Fei Li and Yan Liu. On smoothing algorithms for transmission of stored MPEG video. Journal of Research and Practice in Information Technology, pages 194-209,Vol 33, 2001.

9.Yan Liu and Fei Li. High-level semantics extraction model for video retrieval In Proceedings of IEEE Symposium on Multimedia Software Engineering, Tamkang, Taiwan, pages 71--74, Dec. 11-23, 2000.

10.Yan Liu and Fei Li. High-level semantics extraction and indexing for video retrieval In Proceedings of IASTED International Conference on Internet and Multimedia Systems and Applications, Las Vegas, U.S.A., pages 442--447, Nov. 20-23, 2000.

11.Fei Li, Yan Liu, Jack Yiu-Bun Lee, and Ishfaq Ahmad. Shortest delay scheduling algorithm for lossless quality transmission of stored vbr video under limited bandwidth. South African Computer Journal, pages 146--154, Special Issue: SAICSIT99.

12.Fei Li, Yan Liu, Jack Yiu-Bun Lee, and Ishfaq Ahmad. Shortest delay scheduling algorithm for lossless quality transmission of stored vbr video under limited bandwidth. In Proceedings of South African Institute of Computer Scientist and Information Technologists Annual Research Conference, Hartebeespoort, South Africa, Nov. 1999.

13.Yan Liu, John Chung-Mong Lee, and Fei Li. Updating scheduling algorithm for stored vbr videos under limited bandwidth. In Proceedings of 4th Malaysia International Conference on Communication and 4th IEEE International Symposium on Consumer Electronics, pages 31--34, 1999.

14.Fei Li, Yan Liu, and Ishfaq Ahmad. A lossless quality transmission algorithm for stored vbr videos. In Proceedings of 4th Malaysia International Conference on Communication and 4th IEEE International Symposium on Consumer Electronics, pages 35--38, 1999.

15.Fei Li and Yan Liu. Shortest delay scheduling algorithm for lossless quality transmission of stored vbr video under limited bandwidth. In Proceedings of the Second ACM Hong Kong Postgraduate Research Day, page 16, 1999.

16.Yan Liu. Some aspects of business in information system design in china. In Proceedings of International Conference on Information Technology & Information Industry, pages 303--305, 1998.

17.Yan Liu. Analysis on current status of information system design in china. In Proceedings of International Conference on Information Technology & Information Industry, pages 299--302, 1998.

18.Yan Liu. Marketing strategy for industry of information system design. Journal of Technology and Economics, pages 21--24, 1998.