

[首页](#)[关于我们](#)[投稿指南](#)[征订服务](#)[诚邀合作](#)[留言](#)

现代图书情报技术 » 2013, Vol. 29 » Issue (10) :31-35

[知识组织与知识管理](#)[最新目录](#) | [下期目录](#) | [过刊浏览](#) | [高级检索](#)[<< Previous Articles](#) | [Next Articles >>](#)

视频主对象特征抽取与分类挖掘研究

陈芬¹, 苏新宁²1. 南京理工大学经济管理学院 南京 210094;
2. 南京大学信息管理学院 南京 210093Chen Fen¹, Su Xinning²1. School of Economics & Management, Nanjing University of Science and Technology, Nanjing 210094, China;
2. School of Information Management, Nanjing University, Nanjing 210093, China

- 摘要
- 参考文献
- 相关文章

Download: PDF (607KB) [HTML](#) (1KB) Export: BibTeX or EndNote (RIS) [Supporting Info](#)

摘要 尝试在区域分割的基础上,针对视频帧中用户最为关注的主要角色,提出基于主对象的颜色特征抽取新方法,并在视频分类实验中验证其效果。结果显示,基于主对象的特征抽取能够取得更好的挖掘效果,显示该方法的有效性。

关键词: [主对象特征](#) [视频分类](#) [视频挖掘](#)

Abstract: This article focuses on the main object that users are most concerned in a video frame, proposes a visual feature extraction of main object based on the region segmentation, and validates the mining effect using the proposed feature. The result shows the better mining accuracy using the new feature, and indicates the validity of the method.

Keywords: [Main object feature](#), [Video classification](#), [Video mining](#)

收稿日期: 2013-05-27;

基金资助:本文系教育部人文社会科学研究青年基金项目“基于云平台的视频信息组织和挖掘研究”(项目编号:10YJC870001);中国博士后科学基金项目“基于多模式的视频信息分类挖掘研究”(项目编号:2012M521061)和中央高校基本科研业务费专项资金项目“基于多模式的视频信息结构和模式挖掘”(项目编号:30920130132010)的研究成果之一。

引用本文:

陈芬, 苏新宁. 视频主对象特征抽取与分类挖掘研究[J]. 现代图书情报技术, 2013, V29(10): 31-35

Chen Fen, Su Xinning. Video Classification Based on Main Object Feature Extraction[J], 2013, V29(10): 31-35

链接本文:

<http://www.infotech.ac.cn/CN/> 或 <http://www.infotech.ac.cn/CN/Y2013/V29/I10/31>

[1] Bagheri-Khaligh A, Raziperchikolaei R, Moghaddam M E. A New Method for Shot Classification in Soccer Sports Video Based on SVM Classifier [C]. In: *Proceedings of the IEEE Southwest Symposium on Image Analysis and Interpretation (SSIAI)*. 2012: 109-112.

[2] Azhar H, Amer A. Classification of Surveillance Video Objects Using Chaotic Series[J]. *IET Image Processing*, 2012, 6(7): 919-931.

[3] Kafai M, Bhanu B. Dynamic Bayesian Networks for Vehicle Classification in Video[J]. *IEEE Transactions on Industrial Informatics*, 2012, 8(1): 100-109.

[4] Ekenel H K, Semela T. Multimodal Genre Classification of TV Programs and YouTube Videos[J]. *Multimedia Tools and Applications*, 2013, 63(2): 547-567.

[5] Connolly J F, Granger E, Sabourin R. An Adaptive Classification System for Video-based Face Recognition[J]. *Information Sciences*, 2012, 192: 50-70.

[6] Wang X F, Zhang X P. An ICA Mixture Hidden Conditional Random Field Model for Video Event Classification[J]. *IEEE Transactions on Circuits and Systems for Video Technology*, 2013, 23(1): 46-59.

[7] Mithun N C, Rashid N U, Rahman S M M. Detection and Classification of Vehicles from Video Using Multiple Time-Spatial Images[J]. *IEEE Transactions on Intelligent Transportation Systems*, 2012, 13(3): 1215-1225.

[8] 胡颖俊, 沈航. 基于语义的视频镜头的分类技术[J]. 计算机应用与软件, 2010, 27(7): 230-232. (Hu Yingjun, Shen Hang. Semantic-based Classification Technique of Video Shots[J]. *Computer Applications and Software*, 2010, 27(7): 230-232.)

Service

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ Email Alert
- ▶ RSS

作者相关文章

- ▶ 陈芬
- ▶ 苏新宁

- [9] 赵士伟,卓力,孙少卿,等. 基于数据挖掘的视频镜头分类方法[J]. 北京工业大学学报,2012,38(5): 722-726. (Zhao Shiwei,Zhuo Li,Sun Shaoqing,et al. Data Mining-based Video Shot Classification Method[J]. *Journal of Beijing University of Technology*, 2012,38(5): 722-726.)
- [10] 林彬, 刘群, 王群, 等. 足球视频镜头分类方法[J]. 计算机工程与设计, 2012,33(4): 1468-1471. (Lin Bin,Liu Qun,Wang Qun,et al. Method of Shot Classification for Soccer Video[J]. *Computer Engineering and Design*, 2012,33(4):1468-1471.)
- [11] 李真超, 纪传俊, 林哲, 等. 基于多特征距离学习的视频分类[J]. 计算机应用与软件, 2012,29(12): 10-12,26. (Li Zhenchao, Ji Chuanjun, Lin Zhe, et al. Video Classification with Multiple Feature Distance Learning[J]. *Computer Applications and Software*, 2012,29(12): 10-12, 26.)
- [12] Swain M J, Ballard D H. Color Indexing[J]. *International Journal of Computer Vision*, 1991, 7(1):11-32. 
- [13] Stricker M A, Orengo M. Similarity of Color Images[C].In: *Proceedings of SPIE's Symposium on Electronic Imaging: Science & Technology. Storage and Retrieval for Image and Video Databases*, 1995, 2420: 381-392. Proceedings of SPIE's Symposium on Electronic Imaging: Science target="_blank"> 
- [14] Pass G, Zabih R, Miller J. Comparing Images Using Color Coherence Vectors[C].In: *Proceedings of the 4th ACM International Conference on Multimedia*. New York, NY, USA: ACM,1996: 65-73.
- [15] 黄诚,王国营.一种基于颜色聚合向量的图像检索方法[J]. 计算机工程,2006,32(2):194-196,199. (Huang Cheng, Wang Guoying. A Method of Image Retrieval Based on Color Coherence Vector[J]. *Computer Engineering*,2006,32(2):194-196,199.) 
- [16] Gonzalez R C, Woods R E, Eddins S L. Digital Image Processing[M]. Prentice Hall,2005: 501-502.
- [17] Cohen's Kappa Coefficient[OL].[2013-03-29]. http://en.wikipedia.org/wiki/Cohen%27s_kappa.
- [1] 陈芬, 赖茂生.多特征视频分类挖掘实验研究[J]. 现代图书情报技术, 2012,28(5): 76-80