YONG YUAN

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EDUCATION

University of Chinese Academy of Sciences *Aug. 2013 - Jun. 2016*
M.S. in Signal & Information Processing (Research in image retrieval)
Xidian University *Aug. 2009- Jun. 2013*
B.S. in Computer Engineering

EXPERIENCE

Center for OPTical IMagery Analysis and Learning (OPTIMAL) *Aug. 2013 - Present*
Graduate Researcher *XI'AN, CN*

· Its Retrieval CBIR proficient performance evaluation, mastered BoW bag of words model, SIFT / SURF, VLAD characteristics descriptor.

· Through continuous learning and accumulation master machine learning some commonly used means of dimensionality reduction, clustering algorithms, image classification method and image object recognition technology.

· Studied in depth based on a hash of a large-scale image retrieval technology, familiar with the hash method more popular in recent years. For some popular and classical hashing method was performance testing and evaluation indicators, see HABIR toolkit homepage and hash coding method is proposed based on sparse expression, published in the ICIMCS14, another to write an article on the new hash article to be cast.

· Participated in the contest pkbigdata on image retrieval, in clothes, shoes and other large image library (150,000) do with the money accumulated more experience in search; there is an image of a particular class, such as leather, textile and other image search experience; at 13 done on the order of ten thousand advertising logo Gallery search.

PROJECTS

DuplicateSearch, *Graduate Researcher* *Mar. 2015 - Present*

· DupSearch is a duplicate search for object retrieval or written image retrieval prototype system has great value.

· On average oxford building public database retrieval accuracy of 83.35%, for light, rotation, perspective and so has good adaptability, online match on the server can respond to queries faster and without complicating the situation still existing model there are improvements to improve mAP space.

· Image size of up to 150,000 test library, you can get a very good search results, the algorithm prototype system has been sold to a company, 150,000 clothes library retrieval results detailed in GitHub, in addition, for the search advertising logo can achieve high search accuracy.

PicSearch Web Application, *Graduate Researcher* *Jan. 2015 - Apr. 2015*

· PicSearch is an online image retrieval prototype system that uses convolution to the CNN network model, we can achieve very satisfactory search results.

· Complete the line image feature extraction, and made some dimensionality reduction, feature matching and sorting line background with python implementation python server using lightweight web development framework CherryPy, using front-end interface optimized Boostrap framework.

· Library containing 29,780 images Caltech-256 public data sets, using the characteristics of memory resident mode optimized code, so that it can respond to the user's query (milliseconds) in a timely manner, the online demo Address PicSearch: search.yongyuan .name

Hashing Baseline for Image Retrieval, *Graduate Researcher* *Jan. 2014 - Apr. 2014*

· I do the image retrieval research in early 2013. My mission is to design efficient hashing algorithm to map the semantic similar images to the similar codes. There are two main advantages using hashing method for image retrieval, i.e. storage and computation efficience. To let more researchers focus on design hashing algorithm, I have built a hashing baseline, hoping this project can do some help for some researchers.

TECHNICAL STRENGTHS

Computer Languages	Python, Matlab, C ++ / C, HTML, CSS
Machine Learning	CBIR technology proficient, proficient SVM, BoF, ANN, hash and other common ma
Tools	Git, Chrome, OpenCV, Python web development framework Django
Operating Systems	OS X, Linux

AWARDS

Best Paper Runner-up Award(2014)

National Scholarship(2012)

The First Prize Scholarship(2010)

National Scholarship for Encouragement(2009)