Jie Sun

Career Objective :

Algorithm Engineer

📄 24 years old   📍 Jiaxing , Zhejiang, China

☎ +8618256098356   @ sunjieee@mail.ustc.edu.cn

Educational Qualifications

2010.09-2014.06
University of Electronic Science and Technology of China
Bachelor   Electronic Information Science and Technology
2014.09-Present
University of Science and Technology of China
Master   Information and Communication Engineering

Awards and achievements

- In 2012, participated in ACM-ICPC Asia Regional Competition(Chengdu, China)
- In 2015, participated in Astar Programming Contest semi-finals

Professional skills

My research interests are computer vision and machine learning.
Familiar with C、 C++ and Python programming language.
Familiar with data structure and algorithm.
Work environment is Linux and familiar with shell.

Projects experience

2014.09. 01 - 2015.06. 30

Image retrieval based on vocabulary tree

Given a query image contains an object, the task of image retrieval is to find the images which contains the same object from the dataset of images.
First, hierarchical cluster of image features to visual words. Second, mount the images from dataset to specific visual words. Finally, query images online to find out high similarity images.

2015.09. 01 -2016.05. 31

Matching based on patch

Given two local patch, the task is to determine whether the two patch are similar.
Extract features and similarity measure with CNN networks instead of hand-craft feature and Euclidean distance metric. It can end-to-end train.Meantime, add a networks to learn rotational invariance, scale invariance, translation invariance to improve the performance of matching of a variety of transform patchs.

2016.06. 01 -Present

Learning to the orientation of feature point

Given the patch of a feature point, the task is to find a robust orientation of the feature point, to improve rotation invariance.
First, learn the main orientation of SIFT with CNN networks. Second, fine-tune with Siamese CNN networks. Finally, predict robust orientation with a single CNN networks.