Shuo Chen

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RESEARCH INTERESTS
Computer Vision, Transfer Learning

EDUCATION

University of Amsterdam 01/2018 - Present
Intelligent Sensory Information Systems
PhD Candidate
Advisor: Prof. Cees Snoek

Tsinghua University 09/2014 - 06/2017
Department of Electronic Engineering
Master of Engineering
Advisor: Prof. Qingmin Liao

Nanjing University of Post and Telecommunication 09/2010 - 06/2014
School of Internet of Things
Bachelor of Engineering

GRADUATE COURSES
Pattern Recognition
Digital Image Processing and its Applications
Big Data Systems
Big Data Analytics
Big Data Acquisition and Intelligent Processing
Machine Learning Foundations (Self Study on Coursera)

PUBLICATIONS
Title Master Thesis: Research on Transfer Learning Algorithm based on Generating Weighted Subspaces
An extensive study of transfer learning, including my two main work when I study for a master's degree. The first work is about unsupervised domain adaptation. I proposed the Weighted Subspace Alignment algorithm, using for image classification. The second one is about semi-supervised domain adaptation. In this part, I designed an attention-based deep neural network, training a classifier for action recognition.

Shuo Chen, Fei Zhou and Qingmin Liao, "Visual Domain Adaptation using Weighted Subspace Alignment", the IEEE International Conference on Visual Communications and Image Processing (VCIP), 2016. (**Oral**)

RESEARCH EXPERIENCES

Visiting Student 11/2016 - 01/2018
Multimedia Research Center, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
Advisor: Prof. Yu Qiao and Prof. Yali Wang

Project: Visual Domain Adaptation Challenge
The goal of this challenge is to develop a method of unsupervised domain adaptation for image classification.

Project: Action Recognition
I trained deep networks using Caffe. I designed an attention scheme and added it to the two-stream deep neural network. The two-stream network includes temporal network (RGB images) and spatial network (flow images). We hope the attention scheme

could learn weights that tell us which parts of the frames are beneficial for classification.

Research Assistant 02/2015 - 06/2017
Visual Information Processing Lab, Graduate School at Shenzhen, Tsinghua University
Advisor: Prof. Qingmin Liao and Dr. Fei Zhou

Project: Visual Domain Adaptation
Visual domain adaptation methods attempt to learn a classifier on a labeled source domain and transfer it to a target domain. In this project, I designed a new algorithm based on subspace alignment and implemented the algorithm using Matlab. We gave each source sample a weight and then performed weighted PCA to obtain subspace. The weight was calculated based on the distance.

COMPUTER SKILLS Tensorflow, PyTorch, Caffe, Python, MATLAB, C/C++, LaTeX

AWARDS

Guanghua Scholarship (second prize)	10/2016
Foxconn Scholarship (second prize)	12/2015
School Club Contribution Award	11/2013
School Club Contribution Award	12/2012

INTERNSHIPS *Algorithm Developer Intern* 03/2016 - 07/2016
Shenzhen Cloudream Technology Co., Ltd.

- I designed and wrote algorithms to remove seams in stitched face images with OpenCV using C++.