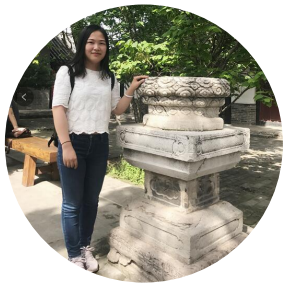

Dongyu **She**

Visual Sentiment Analysis · Object Recognition · Weakly-supervised Detection

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Education

Nankai University — *M.S.*

MASTER in College of Computer and Control Engineering, CV Lab — *Aug. 2016 - Exp. Jun. 2019*

- Advisor: **Jufeng Yang**, Associate Professor, Nankai University, *yangjufeng@nankai.edu.cn*
- Mentor: **Ming-Ming Cheng**, Professor, Nankai University, *cmm@nankai.edu.cn*
- Mentor: **Ming-Hsuan Yang**, Professor, University of California, Merced, *minghsuanyang@gmail.com*
- Mentor: **Paul L. Rosin**, Professor, University of Cardiff, *rosinpl@cardiff.ac.uk*

Nankai University — *B.S.*

Bachelor in College of Computer and Control Engineering; **Bachelor** in Finance — *Aug. 2012 - Jun. 2016*

- Major classes: Data Structure, Object Oriented Programming, Algorithm Design, Operation System, etc.

Publication

Conference

1	Jufeng Yang, ***Dongyu She***, Yu-Kun Lai, Paul Rosin and Ming-Hsuan Yang, **Weakly Supervised Coupled Networks for Visual Sentiment Analysis**	*CVPR 2018 spotlight*
2	Jufeng Yang, ***Dongyu She***, Yu-Kun Lai and Ming-Hsuan Yang, **Retrieving and Classifying Affective Images via Deep Metric Learning**	*AAAI 2018 oral*
3	Jufeng Yang, ***Dongyu She*** and Ming Sun, **Joint Image Emotion Classification and Distribution Learning via Deep Convolutional Neural Network**	*IJCAI 2017*
4	Yuxiang Zhang, Jiamei Fu ***Dongyu She***, Ying Zhang, Senzhang Wang, Jufeng Yang, **Text Emotion Distribution Learning via Multi-Task Convolutional Neural Network**	*IJCAI 2018*
5	Jiamei Fu*, ***Dongyu She****, Xingxu Yao, Yuxiang Zhang, Jufeng Yang, **Deep Coordinated Textual and Visual Network for Sentiment-oriented Cross-modal Retrieval**	*PRICAI 2018*
6	Jufeng Yang, Liyi Chen, Le Zhang, Xiaoxiao Sun, ***Dongyu She***, Shao-Ping Lu, Ming-Ming Cheng , **Historical Context-based Style Classification of Painting Images via Label Distribution Learning**	*ACM MM 2018*

Journal

7	Jufeng Yang, ***Dongyu She***, Ming Sun, Ming-ming Cheng, Liang Wang and Paul Rosin, **Visual Sentiment Prediction based on Automatic Discovery of Affective Regions**	*TMM 2018*

Submitted

2018.05	Jufeng Yang, ***Dongyu She***, Ming-Ming Cheng, Paul L. Rosin, Junwei Han, Liang Wang, Philip H.S. Torr, **Towards Emotion Ambiguity of Visual Content via Label Distribution Learning**	*submitted to TPAMI*

Technical Skills

Coding	**Python, C++**, Pytorch, Caffe, matlab, Linux
Others	**CET6(527)**, LaTex, Photoshop, Visio

Experience

Academic Visitor

UK, Cardiff

Computer Vision Lab, Cardiff University & Advisor: Yu-Kun Lai — *Oct. 2017*

- **Project:** weakly supervised detection; **Invited Talk**: Visual Sentiment Analysis using Convolutional Neural Network

Conference Volunteer

China, Tianjin

ORGANIZING AND RECEPTION — *Apr. 2017*

- Computational Visual Media Conference (CVM 2017)

Reviewer

Conference AND Transaction — *Jan. 2019*

- CVPR2019, ICCV2019, NEPL, ACM TOMM

Projects

1. Weakly Supervised Detection

CV Lab

IDEA & REFERENCE INVESTIGATION & CODING & PAPER WRITING — *Sep. 2016 - PRESENT*

- Detecting a specific soft map that evoking sentiment in a weakly supervised manner, while only requiring for the **image-level labels**.
- Proposing a **weakly supervised coupled convolutional network** (WSCNet) with two branches to leverage the localized information.
- **Detection branch** summaries feature maps to the image-level scores with the cross spatial pooling strategy,**Classification branch** takes both holistic and localized representation into consideration.
- Getting SOA classification result and achieving **comparable detection results** with fully-supervised methods, accepted by **CVPR 2018**.

2. Visual Sentiment Recognition

CV Lab

IDEA & REFERENCE INVESTIGATION & CODING & PAPER WRITING — *Jan. 2016 - PRESENT*

- Learning information from a **large-scale web dataset** to improve the **generalization ability** of the deep model for the recognition.
- Incorporating a **multiple kernel scheme** in the CNN model that can select features from different layers with suitable kernels automatically.
- Comparing with various basic low-level representations and deep features, achieving SOA result, submitted to **ACM MM 2018**
- A web application for recognizing visual sentiment is released for public: *cv.nankai.edu.cn/apps*

3. Sentiment Label Distribution Learning

CV Lab

IDEA & REFERENCE INVESTIGATION & CODING & PAPER WRITING — *Jan. 2017 - PRESENT*

- Addressing the **sentiment ambiguity** problem that image rarely expresses pure emotion, but often a mixture of different emotions via **Label Distribution Learning (LDL)**.
- **Simultaneously** optimizing the classification and distribution prediction in a **multi-task CNN model** for the distribution datasets.
- Exploring **implication** and **exclusion** strategies to transform the dominant sentiment label into distribution for the single-label datasets.
- Getting SOA distribution prediction result and improving the classification performance, accepted by **IJCAI 2017**.

4. Emotion-Based Image Retrieval

CV Lab

IDEA & REFERENCE INVESTIGATION & CODING & PAPER WRITING — *Jun. 2017 - PRESENT*

- Exploring the **hierarchical relation** between sentiments for image retrieval task, that emotions with the **same polarity** are highly related.
- Designing the **sentiment constraint** to consider the natural polarities of emotions during training by generalizing the triplet constraint
- Utilizing the texture information with **sentiment vector** to distinguish affective images based on Gram matrix.
- Retrieving images **in the affective level** and achieving SOA result, accepted by **AAAI 2018**

Honors&Awards

2014 **Merit Student**, honor

2015 **Nankai University 'Gongneng' Scholarship**, the second prize

2015 **China Undergraduate Mathematical Contest in Modeling**, Second Class Award at the provincial level

2016 **Nankai University 'Mingshanyunneng' Scholarship**, the first prize

2017 **Merit Student**, honor

2018 **National Scholarship for Graduate Students**, the first prize