Xiaofang WANG

I am a researcher and engineer on machine learning and deep learning and blending them with many real-life applications across computer vision, geography, physics. 14 Rue de George Sand, Thorigne-Fouillard, 35235 (33) 06 84 99 17 12 wanglegoc@gmail.com https://xiaofanglegoc.github.io/



EDUCATION

PhD, Ecole centrale de Lyon (ECL), France — *computer vision*

Sep. 2011 - March 2015

Title: Unsupervised image segmentation and multiple object tracking based on graph

MS, Central south university, ChangSha, China— *Biomedical Engineering*

Sep. 2009 - Jun 2011

Liver CT image segmentation based on active contour models

BS, Centrale south university, Changsha, China — *Biomedical Engineering*

Sep. 2005 - Jun. 2009

Topic: Medical image segmentation

TEACHING

Introduction to algorithms

First-year engineer, 2015-2017

Object oriented programming with Python

First-year engineer, 2015-2017

Web applications and database

First-year engineer, 2015-2017

EMPLOYMENTS

Siradel, **R&D** — Saint Gregory

JAN 2019 - Now

Topic: Aerial imagery understanding

INRIA, R&D Post-doc— Rennes

April 2018 - Jan 2019

Topic: Crowd detection, tracking and counting

ECL, **Post-doc fellowship**—Lyon

Sep 2017 - March 2018

Topic: 3D object recognition and retrieval

ECL, Associate professor—Lyon

Sep 2017 - March 2018

- Teaching on tutorial courses, group works and projects
- Research on Deep Learning and Domain Adaptation

SKILLS

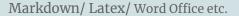
Program language

Python/ C++/ Matlab/ HTML/CSS/ Javascripts

Deep Learning Software

Tensorflow/ Pytorch/ Caffe etc

Documents software and language



PROJECTS

ECL, Visen — tagging the visual content with semantic labels

2011 - 2015

ECL, Pikaflex — picking and kitting objects with an automatic robot grasp system

2017 - 2018

INRIA, SafeCity— video understanding and surveillance system applying in key sites within different cities of France

2018-2019

LANGUAGES

Chinese - native speaker

English - speaking and writing with scientific papers

French - speaking fluently with french people and teaching with it

Point in, Box out: Beyond Counting Persons in Crowds. Yuting liu, Miaojing Shi, Qijun Zhao, Xiaofang Wang. IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR'2019)

Visual and Semantic Knowledge Transfer for Large Scale Semi-Supervised Object Detection Yuxing Tang, Josiah Wang, Xiaofang Wang, Boyang Gao, Emmanuel Dellandrea, and Liming Chen. IEEE transactions on pattern analysis and machine intelligence (**T-PAMI**), 2018, vol. 40, no 12, p. 3045-3058.

RESEARCH INTERESTS

Machine learning —

- Unsupervised learning
- Weakly supervised learning
- Deep learning
- Domain adaptation

Computer vision —

- Image segmentation
- Object tracking
- Image semantic segmentation
- Object localization and recognition
- Scene understanding
- Pose estimation
- Image classification
- Remote imagery classification/ segmentation etc.

SELECTED PUBLICATIONS

Active Colloids Segmentation and Tracking Xiaofang Wang, Boyang Gao, Simon Masnou, Liming Chen, Isaac Theurkauff, Cécile Cottin-Bizonne, Yuqian Zhao, Frank Shih Pattern Recognition (PR) vol.60, pp. 177-188, 2016

A Global/Local Affinity Graph for Image Segmentation

Xiaofang Wang, Yuxing Tang, Simon Masnou, Liming Chen. *IEEE Transactions on Image Processing (TIP)*, vol. 24(4), pp.1399-1411, 2015

Fusing Generic Objectness and Deformable Part-based Models for Weakly Supervised Object Detection

Yuxing Tang, Xiaofang Wang, Emmanuel Dellandréa, Simon Masnou, Liming Chen *IEEE International Conference on Image Processing (ICIP)*, Paris, 2014. (Equal contribution)