Shuai Liao

Email: leo.shine2010@gmail.com   **Github:** https://github.com/leoshine

Education

University of Amsterdam (UvA)   Amsterdam, The Netherlands
Ph.D. candidate in Computer vision and Deep learning   2015.11 – Present
Supervisor: Cees Snoek, Efstratios Gavves

Renmin University of China (RUC)   Beijing, China
MSc. in Computer Science   2012.9 – 2015.7

University of Electronic Science and Technology of China (UESTC)   Chengdu, China
B.E. in Software Engineering   2008.9 – 2012.6

Professional Experience

Qualcomm AI Research, Netherlands   Amsterdam, The Netherlands
Research Intern in video perception team   2020.6 – 2020.10

The University of Queensland, Australia   Brisbane, Australia
Research Intern hosted by Prof. Heng Tao SHEN   2014.4 – 2014.10

Research Interests

Computer Vision: Video understanding; Multi-label classification, Image segmentation.

3D Vision: 3D Camera Pose estimation; Surface & Depth estimation; 3D modelling.

Machine Learning: Transformer, Deep regression networks; Extreme classification.

Selected Publications

[1] **"Quasibinary Classifier for Images with Zero and Multiple Labels"** (ICPR 2020)
   Shuai Liao, Efstratios Gavves, ChangYong Oh, Cees Snoek

[2] **"Spherical Regression: Learning Viewpoints, Surface Normals and 3D Rotations on n-Spheres"** (CVPR 2019)
   Shuai Liao, Efstratios Gavves, Cees Snoek

[3] **"Searching and Matching Texture-free 3D Shapes in Images"** (ICMR 2018)
   Shuai Liao, Efstratios Gavves, Cees Snoek

[4] **"Zero-shot image tagging by hierarchical semantic embedding"**, (SIGIR 2015)
   Xirong Li, *Shuai Liao,* Weiyu Lan, Xiaoyong Du, Gang Yang

[5] **"Tag Features for Geo-Aware Image Classification"**, (TMM 2015)
   Shuai Liao, Xirong Li, Heng Tao Shen, Yang Yang, Xiaoyong Du

[6] **"Building geo-aware tag features for image classification"**, (ICME 2014) (Oral)
   Shuai Liao, Xirong Li, Xiaoxu Wang, Xiaoyong Du

Patents

Learning geometric differentials for matching 3D models to objects in a 2D image, (US Patent 2020)
   Shuai Liao, Efstratios Gavves, Cornelis Gerardus Maria Snoek

Coordinate estimation on n-spheres with spherical regression, (US Patent 2020)
   Shuai Liao, Efstratios Gavves, Cornelis Gerardus Maria Snoek

Services & Teaching & Training

Reviewer for CVPR, ECCV, AAAI, ACM-MM.

Teaching:

- Computer Vision Master course, 2016;
- Applied Machine Learning Master course 2018, 2019;
- Behavior-Based Robotics Bachelor course, 2018;
- Master thesis supervision on *ship pose estimation at port of Rotterdam.*

Chair of [VIS Lab](#) Seminars, University of Amsterdam, 2018;

Summer schools:

- International Computer Vision Summer School, Sicily 2017.
- Machine Learning Summer School, Madrid 2018.
- Deep learning and Bayesian methods Summer school, Moscow 2019.

Awards & Honors

2015   Excellent Graduate of Renmin Uni. of China. (Top 3%)

2014   Graduate Student Scholarship at Renmin Uni. of China.

2013   The National Scholarship at Renmin Uni. of China. (Top 3%)

2012   Outstanding Graduate Student Award at RUC.

Proficiencies & Skills

Programming languages: Python, C++, C, Cuda, OpenGL programming, JavaScript.

Deep learning frame work: PyTorch, Caffe.

Others: Linux programming experience, etc.