

# Shuai Liao

Email: [leo.shine2010@gmail.com](mailto:leo.shine2010@gmail.com)

Personal page: <https://leoshine.github.io/>

## Education

University of Amsterdam (UvA)	Amsterdam, The Netherlands
<i>Ph.D.</i> in Computer vision and Deep learning	2015.11 – 2021.9
Supervisor: Cees Snoek, Efstratios Gavves	
Renmin University of China (RUC)	Beijing, China
<i>MSc. in Computer Science</i>	2012.9 – 2015.7
University of Electronic Science and Technology of China (UESTC)	Chengdu, China
<i>B.E. in Software Engineering</i>	2008.9 – 2012.6

## Research Experience

Qualcomm AI Research, Netherlands	Amsterdam, The Netherlands
<i>Research Intern</i> in video perception team	2020.6 – 2020.10
The University of Queensland, Australia	Brisbane, Australia
<i>Research Intern</i> hosted by Prof. <a href="#">Heng Tao SHEN</a>	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.