

Shengjie Liu

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EDUCATION

Sun Yat-sen University

- B.S in Geographical Information Science, GPA: 3.9/4.0
 - Thesis: Deep Learning for Land Use and Land Cover Classification
 - Advisers: Prof. Qian Shi, Prof. Zhixin Qi

Guangzhou
Aug 2015 – Jun 2019

EXPERIENCE

HKU Light Pollution ECF Team, The University of Hong Kong

- Research Assistant, Department of Physics
 - Investigations on light pollution in Hong Kong using satellite and site-based data
 - Principal Investigator: Dr. Jason C.S. Pun

Hong Kong
Sep 2019 – Present

OneSpace Technology

- Remote Sensing Engineer, Department of Spatial Information
 - Crop type classification using Sentinel-2 satellite data
 - Water quality parameters estimation
 - Fine resolution PM2.5 monitoring using Zhuhai-1 hyperspectral data
 - Estimation of soil nutrient contents using Landsat-OLI imagery

Chongqing
Jul 2019 – Aug 2019

Guangdong Provincial Key Lab. of Urbanization and Geo-simulation, Sun Yat-sen University

- Research Assistant (Part Time)
 - Wide contextual residual network with active learning for remote sensing image classification
 - Combining optical and radar imagery from Sentinel for land use and land cover mapping
 - Multitask deep learning for hyperspectral image classification
 - Exploration of social segregation using mobility-activity data
 - Sustainable urban expansion of Zhuhai using GIS methods such as local Moran's I
 - Capturing the collapse and rise of the post-Soviet states from nighttime light data

Guangzhou
Oct 2017 – Apr 2019

GIS Lab, Sun Yat-sen University

- Assistant Lab Manager (Part Time), School of Geography and Planning
 - Maintain 82 computers and 2 multimedia systems for classes

Guangzhou
Jul 2017 – Dec 2018

Institute of Urbanization, Sun Yat-sen University

- Research Assistant (Part Time)
 - Discover urban structure using mobility GPS data from cell phones with clustering analysis
 - Analyze the distributions of diseases and infected people using online medical record and network analysis

Guangzhou
Mar 2018 – Jun 2018

PUBLICATIONS

Liu, S., Qi, Z., Li, X. and Yeh, A.G.O., 2019. Integration of Convolutional Neural Networks and Object-Based Post-Classification Refinement for Land Use and Land Cover Mapping with Optical and SAR Data. *Remote Sens.*, 11(6), p.690.

Liu, S., Luo, H., Tu, Y., He, Z. and Li, J., 2018, July. Wide Contextual Residual Network with Active Learning for Remote Sensing Image Classification. In *IGARSS 2018*, pp. 7145-7148.

MANUSCRIPTS

Liu, S. and Shi, Q.. Multitask Deep Learning for Hyperspectral Image Classification. Submitted to *IEEE Geoscience and Remote Sensing Letters*, 1st revision.

Liu, S. and Shi, Q.. Active Ensemble Learning for Remote Sensing Image Classification. In preparation.

Liu, S. and Qi, Z.. Capturing the Collapse and Rise of the Post-Soviet States from Nighttime Light Data. In preparation.

AWARDS & SCHOLARSHIPS

- Alibaba Cloud German AI Challenge 2018: Remote Sensing Scene Classification of Local Climate Zones Preliminary: 18/1329 (top 2%), Semi-Finals: 29/1329 (top 3%). Feb 2019
- Scholarship of the EMBA Alumni Association for Real Estate of Sun Yat-sen University Dec 2018
- IGARSS Travel Grant, IEEE Geoscience and Remote Sensing Society (Declined) Jul 2018
- The First Prize of Excellent Undergraduate Scholarship, Sun Yat-sen University 2017 – 2018
- The Third Prize of Excellent Undergraduate Scholarship, Sun Yat-sen University 2016 – 2017
- The Third Prize of Excellent Undergraduate Scholarship, Sun Yat-sen University 2015 – 2016

LANGUAGES

English: Fluent; Cantonese: Native speaker; Mandarin: Native speaker.

SKILLS

Python, \LaTeX , MATLAB, Machine learning, Deep learning, Satellite image processing, Spatial analysis.

Last updated on 2019-09-21