Shengjie Liu

352, 6/F, Chung Ah Building, 352-366 Des Voeux Road West, Western District, Hong Kong

liushengjie0756@gmail.com • +852 66348094 • +86 13112316819 • https://stop68.github.io

EDUCATION

Sun Yat-sen University — Guangzhou
- B.S in Geographical Information Science, GPA: 3.9/4.0 — Aug 2015 – Jun 2019
  - Thesis: Deep Learning for Land Use and Land Cover Classification
  - Advisers: Prof. Qian Shi, Prof. Zhixin Qi

EXPERIENCE

HKU Light Pollution ECF Team, The University of Hong Kong — Hong Kong
- Research Assistant, Department of Physics — Sep 2019 – Present
  - Investigations on light pollution in Hong Kong using satellite and site-based data
  - Principal Investigator: Dr. Jason C.S. Pun

OneSpace Technology — Chongqing
- Remote Sensing Engineer, Department of Spatial Information — Jul 2019 – Aug 2019
  - 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

Guangdong Provincial Key Lab. of Urbanization and Geo-simulation, Sun Yat-sen University — Guangzhou
- Research Assistant (Part Time) — Oct 2017 – Apr 2019
  - 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

GIS Lab, Sun Yat-sen University — Guangzhou
- Assistant Lab Manager (Part Time), School of Geography and Planning — Jul 2017 – Dec 2018
  - Maintain 82 computers and 2 multimedia systems for classes

Institute of Urbanization, Sun Yat-sen University — Guangzhou
- Research Assistant (Part Time) — Mar 2018 – Jun 2018
  - 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

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 — Feb 2019
  Preliminary: 18/1329 (top 2%), Semi-Finals: 29/1329 (top 3%).
- 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 2019-09-16