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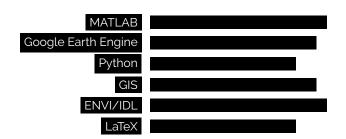
@Shunan Feng

Remote Sensing Modelling Spatial Analysis

WHO AM I?

A self motivated learner. Passionate in remote sensing, modelling and spatial analysis.

The best thing about earth science to me is the combination of fieldwork, geospatial data analysis, visualization. I am interested in understanding the process and climate response of earth surface, particularly time series analysis by combining the in-situ measurement, remote sensing or other geospatial data and model results. My experience with remote sensing imagery processing, modelling, spatial statistics, data analysis and visulization enables me to learn and practice skills with MATLAB, Python, Google Earth Engine, ENVI/IDL and ArcGIS etc.



WORK EXPERIENCE

09/2019 -- present Remote Sensing and GIS Associate

International Committee of the Red Cross, Switzerland

- Processing and analyzing remote sensing imagery (Digital Globe, Airbus, drone image etc.).
- Benchmarking machine learning for landcover classification, change detection, damage assessment and agricultural monitoring.
- · Organize internal training of geospatial data analysis.
- Producing webmaps and supporting emergency response to humanitarian crisis.
 ArcGIS Pro and Online Services / Google Earth Engine / Python

EDUCATION

2017 – 2019 MSc in Earth Science

Uppsala University, Sweden

Thesis: Cold surface layer dynamics of Storglaciären, northern Sweden 2009-2019

Specialized in remote sensing and modelling of glaciology and hydrology. Condcuted fieldwork at Tarfala Research Station. Spatial analysis and statistics at different scale.

MATLAB / Google Earth Engine / LaTeX / Git GitHub

2013 - 2017 **BSc in Physical Geography**

Central China Normal University, China

Thesis: Retrieval of Chlorophyll-A Concentration from 30-year Landsat Imagery in Erhai, China. Specialized in remote sensing of water and spatial analysis.

ENVI/IDL / ArcGIS

SCHOLARSHIPS AND AWARDS

2018 – 2019 Linnaeus Scholarship (12,700 SEK), Otterborg Stipend (15,000 SEK), Jänes Scholarship (3,700

EK) Uppsala University

Research and Travel Scholarship for conducting thesis fieldwork

2017 Uppsala University IPK Scholarship Uppsala University

cover all tuition fee (290,000 SEK)

2014 - 2016 Shuren Silver Scholarship (2014) and Boya Scholarship (2015, 2016) Central China Normal University

LANGUAGES CURRENT STATUS

Chinese - native Currently interested in machine learning and tensorflow. Also practicing interactive **English** - proficient data visualization with python modules (e.g. altair, plotly etc.).

ACADEMIC EXPERIENCE

11/2018 - 01/2019 Drought analysis with Google Earth Engine

manusript will be submitted to a peer-reviewed journal

Uppsala University, Sweden

- · Investigating vegetation response to meteorological drought.
- · Spatial correlation of SPEI and NDVI anomalies in Google Earth Engine.

MATLAB / Google Earth Engine

06/2018 - 04/2019 Cold Surface Layer Dynamics

Degree Project Fieldwork

Tarfala Research Station, Sweden

Fieldwork: Measure the glacier subsurface temperature by manufacturing and installing a thermistor string in the ablation zone of Storglaciären.

Thermistor String installation / Glaciology / Geophysical Survey

03/2018 - 04/2019 Glacier Surface Velocity Reconstruction

Uppsala University, Sweden

- Derive glacier surface velocity from Landsat series imagery. Historical surge events are identified by the reconstructed glacier surface velocity.
- Image processing (cloud detection, georeferencing by a discrete fast Fourier transform); surface feature track (COSI-CORR).

MATLAB / ENVI/IDL

03/2017 - 08/2017 Erhai Lake Projec

Continuation of bachelor's thesis

Central China University

Retrieve chlorophyll-a (Chl-a) concentration from Landsat imagery using a modified three-band model. Algorithm experiment using ENVI/IDL. (Continuation of bachelor thesis)

ENVI/IDL / ArcGIS

03/2015 - 03/2016The classification of sea ice in the Canadian Arctic Archipelago during summer using MODIS data Central China University

Sea ice classification from MODIS data by combining weekly released digital Arctic regional sea ice charts from Canadian Ice Service; ENVI; reflectance analysis.

ENVI/IDL / ArcGIS

PUBLICATION AND CONFERENCE

· Peer Reviewed Article:

1. Tan, W., Liu, P., Liu, Y., Yang, S., Feng, S., 2017. A 30-Year Assessment of Phytoplankton Blooms in Erhai Lake Using Landsat Imagery: 1987 to 2016. Remote Sensing 9, 1265. https://doi.org/10.3390/rs9121265

· Conference:

- 1. **Feng, S.** and Pettersson, R., 2019. Surge Type Glacier Identification on Northeast Spitsbergen, Svalbard from Landsat Imagery 1984-2018 (poster at EGU2019)
- 2. Fileni, F., **Feng, S.**, Erikson., T, Winterdahl, M., Pettersson, R., Spatial and temporal analysis of vegetation response to meteorological droughts in California, 1984-2018 (poster at EGU2019)