SHUNAN **FENG**

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EDUCATION

Sept 2017- June 2019 **Uppsala, Sweden**

***MSc in Physical Geography*, Uppsala Universitet**

Thesis: **Supervisor: Dr. Rickard Pettersson, Dr. Sergey Marchenko**

Cold surface layer dynamics of Storglaciären**,** sub-Arctic Sweden 2009-2019

Sept 2013- June 2017 **Wuhan, China**

***BSc in Physical Geography*, Central China Normal University**

Thesis: **Supervisor: Dr. Wenxia Tan**

Retrieval of Chlorophyll-A Concentration from 30-year Landsat Imagery in Erhai, China

EXPERIENCE

Nov 2018 – Jan 2019 **Uppsala, Sweden**

Student Research Project, The Application of Google Earth Engine

"Spatial and temporal analysis of vegetation response to meteorological droughts in California, 1984-2018"

- Apply different remote sensing indices (e.g. NDVI) and compute the meteorological model (SPEI) using in-situ and global land data assimilation system data.
- Spatial correlation of SPEI and NDVI anomalies in Google Earth Engine.

June 2018 – April 2019 **Tarfala Research Station, Sweden**

Degree Project Fieldwork, Cold Surface Layer Dynamics

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

Mar 2018 – Sept 2019 **Uppsala, Sweden**

Independent Research Project, Glacier Surface Velocity Reconstruction

"Surge type glacier identification on Northeast Spitsbergen based on Landsat imagery 1984-2018"

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

Oct 2017 – Oct 2018 **Uppsala, Sweden**

Mater Student Representative

Mar 2017 – Aug 2017 **Wuhan, China**

Research Assistant, Erhai Lake Project

"A 30-Year Assessment of Phytoplankton Blooms in Erhai Lake Using Landsat Imagery: 1987 to 2016" (Continuation of bachelor thesis)

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

June 2016 – Sept 2016 **Xiaogan, China**

Intern, Surveyor

Conducted surveys of land use investigation in rural Yangtze River area using total station and GPS

Mar 2015 – Mar 2016 **Wuhan, China**

Participant, Undergraduate Innovation and Research Program

"The classification of sea ice in the Canadian Arctic Archipelago during summer using MODIS data"

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

SKILLS

- MATLAB, ENVI/IDL, ArcGIS, Google Earth Engine (https://github.com/fsn1995)
- Language: Chinese and English （TOEFL: 109）
- Fieldwork experience with meteorological instruments and geophysical survey on glacier.

PUBLICATION & CONFERENCE

Peer-reviewed Scientific 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

April 2019 **Vienna, Austria**

EGU General Assembly 2019

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

SCHOLARSHIPS & AWARDS

- Linnaeus Scholarship (12,700 SEK) & Otterborg Stipend (15,000 SEK) & Jänes Scholarship (3,700 SEK) (2018)–Uppsala University Research&Travel Scholarship
- Uppsala University IPK Scholarship (2017)–Cover the tuition fee (290,000 SEK)
- Shuren Silver Scholarship (2014) and Boya Scholarship (2015, 2016) – Central China Normal University

PERSONAL PROFILE

I am interested in understanding the process and climate response of earth surface (e.g. glaciers, snow and sea ice etc.), particularly the time series analysis by combining the in-situ measurement and remote sensing data. This had led me to specialize in remote sensing and GIS during my undergraduate study and continued experimenting the application of remote sensing in reconstructing the glacier surface velocity in my master study. My experience with Landsat/MODIS image processing enables me to learn and practice MATLAB, ENVI/IDL, Google Earth Engine and ArcGIS. The desire of gaining more experience in geophysical measurement motivated me to visit Tarfala Research Station for fieldwork and installed a thermistor string on Storglaciären, Sweden. The data was collected in April 2019 and was used in my master's thesis. The evolution of the cold surface layer was derived from a coupled surface energy balance-snowpack model and thermistor measurements.