



Zhihao LIU

Nationality: Chinese ☎ (+47) 48648781 **Date of birth:** 26/03/1993

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WORK EXPERIENCE

Research Assistant

UiO [12/2021 – Current]

As a research assistant [in this group of scientists](#), I joined the field (drone) trip and worked on an algorithm for processing and co-registering DEMs with ICESat-2 datasets. In order to map the snow depth of the entire Norway, my modeling toolbox includes xDEM(co-registration), SciPy (optimizing, interpolation module), Rasterio, Shapely, Geopandas, and XGBoost regression...

Field Technician / Geomatics Professional

BGP OFFSHORE, CNPC [07/2014 – 06/2021]

- [3D/4D/OBN Seismic Surveys as navigator and technician globally \(Norway, UK, West Africa\).](#)
- [Coding for Seismic: optimized workflows by data-driving solutions.](#)
- Worked with a world-class seismic team in a multicultural environment & QHSE culture.
- Get promoted to Assistant Party Chief.
- Register of Licensed Surveyors of P.R.C.

EDUCATION AND TRAINING

Master in Geoscience

Universitetet i Oslo [08/2021 – Current]

Address: Oslo (Norway)

Curriculum: Advanced Remote Sensing and Topographic Analysis | IPCC AR6 Seminar | The Surface Energy Balance in Cold Environment | Floods, Avalanches and Landslides | Surveying, photogrammetry and spatial analysis | Geophysical Data Science

Thesis: [Benchmarking DEM Precision: Workflows and Applications on Snow Depth.](#)

Report:

- Change Detection on Agriculture: a case study of the Western Nile Delta in Egypt
- Validating and Mapping Lake Surface Temperature from MODIS: a case study of Lakes in Sweden
- Stereo-derived DEMs, Assessment, Validation, and Change Detection: a case study...
- [How to bury Longyearbyen by an avalanche: Mass movement modeling](#)
- [Oslo Housing Price MCDA Model: a perspective from spatial contributions](#)
- [What if the ice block expedition 1959 happens in 2021? You can not blame it on climate change](#)

Field(s) of study

- Geomorphology and Geomatics

Bachelor in Geodesy and Geomatics

South West Petroleum University [08/2010 – 07/2014]

Address: Chengdu (China)

- With a background in Engineering, Cartography, GNSS and GIS.

- GPA overall 83/100 major, A for bachelor's thesis (A WebGIS system for urban infrastructure management).

LANGUAGE SKILLS

Mother tongue(s): **Chinese**

Other language(s): **English (Professional working proficiency)** | **Norwegian (pre-beginner)**

DIGITAL SKILLS

My Digital Skills

Automating GIS / Data-driving Solution / Data QC & Processing / QGIS / Numerical Modeling / ArcGIS / Python

PROJECTS

North Sea Quad 35 Hybrid 3D seismic survey

[07/2020 – 10/2020]

[Quad 35 is the first hybrid seismic combined streamers and nodes](#) for commercial purposes. I worked as a technician for contract technical review, onboard acquisition, data QC & reprocessing, and follow-up work. I got [the best commendation](#) from the client for modeling this novel acquisition to make it more efficient and understandable.

SNOWDEPTH – Global snow depths from spaceborne remote sensing for permafrost, high-elevation precipitation, and climate reanalysis

[01/2022 – Current]

This research is key to understanding the snow-depth-related climate mechanism or application, e.g. permafrost, high-mountain precipitation, hydropower...As a research assistant, I work on the ICESat-2 dataset and a variety of DEM products; thus far, I am able to generate snow depth measurements for entire Norway. Later, I am trying to interpolate and feed the data into the climate/hydrological models and contribute to the open source community of the cryosphere.

HOBBIES AND INTERESTS

Marathon

- Not bad runner with 130 (half-marathon) and 330 (marathon) of the personal best.
- Have organized medium size marathon (15K) and was in charge of supply and volunteers.

REFERENCES

2016 - 2021:

Chief geophysicist of BGP Prospector, [Bo Wen](#), Email: wenbo01@cnpc.com.cn, Mobile: +86 18622259275

2021 - Present

Project Leader and Co-supervisor, [Désirée Treichler](#), Email: desiree.treichler@geo.uio.no, Mobile: +47 22857869

2021 - Present

Professor and Supervisor, [Andreas Max Kääb](#), Email: a.m.kaab@geo.uio.no, Mobile: +47 22855812