

Oleg Zheleznyy



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Languages English (C2), German (A2), Russian (native)

Education

Since 2024 PhD student at the Professorship of Earth Observation for Ecosystem Management, Technische Universität München
2021-2024 M.Sc. in Global Change Geography, Humboldt-Universität zu Berlin
2016-2020 B.Sc. in Geography (Physical Geography and Landscape Science), Lomonosov Moscow State University, diploma with honours (first-class)

Skills

Computer skills Programming in R and Python, QGIS (experienced), ArcGIS, Google Earth Engine, MS Office software, Google Docs & Forms, Adobe Illustrator, HTML & Git basics
Field / lab skills Geobotanical and soil surveying, UAV A1/A3 EU license, meteorological equipment installation; water and biomass sampling; field mapping; fieldwork planning

Scientific interests

Remote sensing of the environment, land use and land cover change, boreal ecosystems, forest disturbance and recovery, conservation, landscape and ecosystem dynamics, environmental modelling, landscape ecology

Work experience

2021 – 2024 Student Assistant at the Conservation Biogeography Lab, Faculty of Mathematics and Natural Sciences, Geography Department, Humboldt-Universität zu Berlin: data analysis, GIS work, seminar preparation.
2021 – 2024 Researcher (part-time, remotely), Barguzinsky Nature Reserve and Zabaikalsky National Park ("Zapovednoye Podlemorye"): administering spatial databases, mapmaking, data analysis.
10/2020 – 12/2020 Research Assistant, Aerospace research methods lab, Lomonosov Moscow State University, Faculty of Geography: remote sensing data analysis, Google Earth Engine workflows, report preparation.

Internships

06/2019 Russian Academy of Sciences, Space Research Institute, Terrestrial ecosystem monitoring lab: remote sensing of wildfires.
07/2019 Barguzinsky Nature Reserve ("Zapovednoye Podlemorye"), Buryat Republic, Russia: field data collection, landscape unit mapping.
09/2020 Moscow State University, Faculty of Geography, Aerospace methods lab: remote sensing data processing (Norilsk vegetation project).

02/2020 Winter Expedition of the MSU Meteorology and Climatology department, Elbrus region: GIS specialist, equipment management.

Publications

Composition of post-fire vegetation in East Siberian boreal forests estimated from Sentinel-2 data, M.Sc. thesis (2024).

Zheleznyy O., Tutubalina O., Kravtsova V.I. (2022). Assessment of changes in vegetation of the Norilsk industrial region with remote sensing data, based on the trend analysis of spectral indices. *Modern problems of Earth Remote Sensing from space*, 19(1), 170-178. (In Russian)

Zheleznyy O., Ilina P., Solovyeva M., Pilipenko G. (2023). Environmental factors of the Baikal seal (*Pusa sibirica*) movements. *Protected Areas: Past, Present, Future. Scientific Papers of Khvalynsky National Park*, 15, 11-18. (In Russian).

Zheleznyy O., Kozyreva M., Shilyakina M., Kurop A. (2020). After-fire forest cover dynamics in the Barguzinsky Nature Reserve. *Abstracts 4th Conference of Society for Conservation GIS in Russia: Using GIS and Remote Sensing for Nature Protection*, 19-24.

Zheleznyy O. (2019). Wildfire-induced forest cover change in the Barguzinsky Nature Reserve. *Russian Journal of Ecosystem Ecology*, 4(4), 1-11.

Awards

2020 Winner of the competition of student scientific projects organised by the Arctic and Antarctic Research Institute

2020 Winner of Moscow State University Olympiad "Lomonosov"

2016 Gold medal winner in the International Geography Olympiad (iGeo), Beijing

Other interests

Scientific illustration and design, hiking and travel, visual arts and literature