
Seeking R&D Seismologist for Geothermal Development

Overview

Zanskar Geothermal and Minerals Inc. is seeking a flexible Research and Development Seismologist to lead our company's adaptation and extension of recent advances in seismology for geothermal applications. Recent advanced degree candidates with advanced processing and coding skills plus an interest in participating in field data acquisition are encouraged to apply.

Background

Beneath our feet is enough heat energy to potentially enable a renewable electricity grid. Geothermal energy is stored in rock and circulated by fluids. In special geologic cases, that heat is concentrated at shallow depths in quantities that it can be tapped for power generation. However, most commercial-scale geothermal resources provide no visible clues at the surface of the earth. New geoscience and data science tools are making it possible to discover and characterize these hidden resources for development.

Zanskar is a geothermal exploration company accelerating the transition to carbon-free electricity generation by identifying and characterizing new geothermal resources. Zanskar does this by combining big data, machine learning, advanced seismic imaging, and a highly interdisciplinary team to build a suite of new tools to discover these resources and de-risk their development.

Zanskar is based in the Salt Lake City, UT area. It is a venture-backed startup founded in 2019 by Stanford and UCSC geoscience PhDs. Zanskar provides services to and partners with independent geothermal power plant developers and operators and private equity investors to discover and improve development outcomes of geothermal resources.

Zanskar has experience performing geologic studies in geothermal exploration in western Alaska, California, Utah, Nevada, Oregon, New Mexico, and Turkey. Zanskar is supported by Research Fellowships at the Lawrence Berkeley National Laboratory, with funding from the Department of Energy's Geothermal Technologies Office. Zanskar recently closed a Series Seed financing, led by Prime Impact Fund, with participation from 7 venture capital funds.

Position Available

Zanskar seeks a Seismologist with interests in seismic imaging, inversion and tomography using active and passive large-N seismic array datasets. Several large-N seismic surveys have been done across operating geothermal fields in recent years. The resulting data allow for high-resolution, full-wavefield imaging of impulsive and emergent signals from complex structures and fluid-rock interactions. The Seismologist will process and make use of such data to build 3D models and images of these structures and interactions. They will adapt, extend, and innovate new methods to complete this task. They will participate in field work in the western USA and abroad in order to understand and improve the practical value of these observations. They will manage ongoing research collaborations and partnerships with academic and industry partners, and support government grant and contract work.

Role of Seismologist

The Seismologist will work as part of a team of geologists, geophysicists, and data scientists and may manage and be supported by junior-level seismologists and coders.

Required Qualifications

Candidates must hold a PhD in geophysics or a related field by the time of hire. The successful applicant should have experience with signal processing, seismic data imaging and inversion, a strong record of peer-reviewed publication or equivalent industry experience and demonstrated capability of independent research and productivity.

Location

We'd love to have you based in Utah with the rest of us, but this role is open to remote candidates with required periodic travel to our headquarters in Utah and to support field acquisition programs.

How to apply

Please submit a brief cover letter and CV/resume to joel@zanskar.us before May 1, 2021.

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Zanskar is an equal opportunity employer and complies with all applicable federal, state, and local fair employment practices laws. Zanskar strictly prohibits and does not tolerate discrimination against applicants because of race, color, religion, creed, national origin or ancestry, ethnicity, sex, pregnancy, gender (including gender nonconformity and status as a transgender individual), age, physical or mental disability, citizenship, past, current, or prospective service in the uniformed services, or any other characteristic protected under applicable federal, state, or local law