

Stanford

Robert Sare

- Ph.D. Student in Geological Sciences
- Masters Student in Geological and Environmental Sciences

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Processing and analysis of high-resolution topographic data and satellite imagery; spectral methods for feature detection (fault scarps) in digital topographic data; UAV/satellite photogrammetry and mapping; real-time volcano monitoring using multiple data sources (gas measurements, tree stress, deformation)

Publications

PUBLICATIONS

- **Regional-scale detection of fault scarps and other tectonic landforms: Examples from Northern California** *Journal of Geophysical Research: Solid Earth*
Sare, R., Hilley, G. E., DeLong, S. B.
2019; 124
- **Establishing chronologies for alluvial-fan sequences with analysis of high-resolution topographic data: San Luis Valley, Colorado, USA** *GEOSPHERE*
Johnstone, S. A., Hudson, A. M., Nicovich, S., Ruleman, C. A., Sare, R. M., Thompson, R. A.
2018; 14 (6): 2487–2504
- **Scarplet: A Python package for topographic template matching and diffusion dating** *Journal of Open Source Software*
Sare, R., Hilley, G. E.
2018; 3 (31)