

Curriculum Vita:
Robert J. Ferguson, Ph.D.
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Appointments

- 2007-present Associate Professor of Geophysics, Department of Geoscience, University of Calgary, Canada
- 2017-present Principal Investigator, City Fibre as a Sensor (CFaaS), University of Calgary, Canada
- 2014-2019 Director, Orthogonal Geophysics Inc, Calgary, Canada
- 2007-2012 Associate Director, Consortium for Research in Elastic Wave Exploration Seismology (CREWES), University of Calgary, Canada
- 2001-2007 Associate Professor of Geophysics, Department of Geology and Geophysics, University of Texas, Austin, USA
- 2005 Visiting Professor, Department Geophysics and Petroleum Engineering, NTNU, Norway
- 1999-2001 Lead Research Scientist (Imaging), Chevron, USA

Research interests

- Geophysical imaging, data processing, and inversion with specialties in seismic (conventional & DAS) plus GPR

Teaching

- Advanced seismic & GPR imaging
- Theoretical seismology
- Geophysical potential fields

- High-enrolment non-science major: Natural disasters
- Mining & environmental geophysics

Publications since 2020

- [1] Ferguson, R. J. Phase shift plus interpolation reference traveltimes in anisotropic media. *Geophysics*, 2023, in press.
- [2] Ferguson R. J. and C. M. Mosher. Geophone station orientation: machine learning, DAS, and an onsite generator at Mt. Meager, B.C. In *Conference Proceedings, NSG2021, 27th European Meeting of Environmental and Engineering Geophysics*. Eur. Assn. Geosci. Eng., 2023, accepted.
- [3] Ferguson R. J. and C. M. Mosher. Geophone hodogram analysis: Ice failure Localization at Mt. Meager, B.C. In *Conference Proceedings, NSG2021, 27th European Meeting of Environmental and Engineering Geophysics*. Eur. Assn. Geosci. Eng., 2023, accepted.
- [4] Mosher, C. M., S. Sood, and R. J. Ferguson. Javaseis cloud: a micro-service framework for seismic processing. In *2023 Rice Oil & Gas HPC Conference*, Houston, United States, 2023, accepted.
- [5] Mish J., R. J. Ferguson, and C. M. Mosher. Distributed Acoustic Sensing and Machine Learning: Rockfall Detection at Mt. Meager, B.C. In *Conference Proceedings, NSG2021, 27th European Meeting of Environmental and Engineering Geophysics*. Eur. Assn. Geosci. Eng., 2023, accepted.
- [6] Ercoli M. and R. J. Ferguson. GPR attenuation compensation by Gabor deconvolution: seismogenic fault imaging at Castelluccio di Norcia (central Italy). *Geophysics*, 87(4):1–74, 2022.
- [7] Ferguson R. J. and C. M. Mosher. Taking the seismic temperature of a glacier: Mount meager, british columbia. In *84th EAGE Conference and Exhibition Incorporating SPE EUROPEC 2022*, number 1 in 2022, pages 1–5. European Association of Geoscientists & Engineers, 2022.
- [8] Mosher, C. M., S. Sood, R. J. Ferguson, and J. Mish. Javaseis cloud: A cloud-native framework for seismic I/O. In *2022 Rice Oil & Gas HPC Conference*, Houston, United States, March 2022.
- [9] Ferguson, R. J., C. M. Mosher, J. Dettmer, and J. Mish. Distributed acoustic sensing of daylight on a glacier in Canada: hotspot monitoring. In *Conference Proceedings, NSG2021, 27th European Meeting of Environmental and Engineering Geophysics*, pages 1–5. European Association of Geoscientists & Engineers, 2021.

- [10] Ferguson, R. J., M. A. D. McDonald, and D. J. Basto. Take the eh? train: Distributed acoustic sensing (DAS) of commuter trains in a Canadian city. *Journal of Applied Geophysics*, 183, 2020.
- [11] Audia, M. and R. J. Ferguson. Distributed acoustic sensing: explanation of signal anomalously responsive to traffic noise. In *Geoconvention 2020, Calgary*. Can. Soc. Expl. Geoph., 2020.
- [12] Eaton, E. M. and R. J. Ferguson. The seismology of active transportation. In *Geoconvention 2020, Calgary*. Can. Soc. Expl. Geoph., 2020.
- [13] Ferguson, R. J., M. A. D. McDonald, and D. J. Basto. Distributed acoustic sensing the Red Line in Calgary: where is my train? In *Geoconvention 2021, Calgary*. Can. Soc. Expl. Geoph., 2020.