

Nori Nakata

Appointments

Staff Scientist, Lawrence Berkeley National Laboratory, USA Principal Research Scientist, Massachusetts Institute of Technology Lissa and Cy Wagner Assistant Professor, University of Oklahoma George Thompson Postdoctoral Fellow, Stanford University 2020-present 2019-present 2016-2018 2013-2016

Educational and Academic Background

Kyoto University	Kyoto, Japan	Global Engineering	B. Eng., 2008
Kyoto University	Kyoto, Japan	Civil Engineering	M. Eng., 2010
Colorado School of Mines	Colorado, US	Geophysics	Ph.D., 2013

Selected Publications

- Nakata, N., J. P. Chang, J. F. Lawrence, and P. Boue (2015) Body-wave extraction and tomography at Long Beach, California, with ambient-noise interferometry, *J. Geophys. Res.*, **120**, 1159-1173.
- Nakata, N., R. Snieder, T. Tsuji, K. Larner, and T. Matsuoka (2011) Shear-wave imaging from traffic noise using seismic interferometry by cross-coherence, *Geophysics*, **76**(6), SA97-SA106.
- Nakata, N. and G. C. Beroza; Reverse-time migration for microseismic sources using the geometric mean as an imaging condition, *Geophysics*, 81, 2, KS51–KS60
- Nakata, N. and D. R. Shelly (2018) Imaging a crustal low-velocity layer using reflected seismic waves from the 2014 earthquake swarm at Long Valley Caldera, California: The magmatic system roof?, Geophys. Res. Lett., 45, 3481-3488.

Nakata, N., L. Gualtieri, and A. Fichtner (2019) Seismic Ambient Noise, Cambridge University Press, 370pp. (Total 68 publications, 43 invited talks)

Research Interests

Through research I aim to gain better understanding of 3D and 4D natural and manmade structures by analyzing seismic waves. Among the topics I am interested in predicting ground motion caused by large earthquakes, understanding earthquake source physics, discerning the history of the Earth, anticipating volcanic eruptions, and imaging the distribution of natural resources (e.g., petroleum, mines, geothermal). Seismic waves sample Earth's interior, and hence we can obtain information of the Earth in 3D. Temporally repeating these measurements opens a window into the dynamics of the Earth. To extract such information, I use manmade seismic sources, earthquakes, microseismic, and natural and anthropogenic background noise (aka ambient seismic noise).

Awards, Recognition, and Professional Activities

- 2018-present: Associate editor of Journal of Geophysical Research
- 2020-2022: Associate editor of IEEE Transactions on Geoscience and Remote Sensing
- 2023: Early Career Scientist Award, International Union of Geodesy and Geophysics (IUGG)
- 2017: Young Scientist Award, Seismological Society of Japan
- 2013: Outstanding PhD thesis, Colorado School of Mines

Early Career Scientist Award (2023) of the International Union of Geodesy and Geophysics (IUGG)



http://iugg.org/