

James Atterholt

PhD Student in Geophysics, California Institute of Technology

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Education

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| 2019-present | California Institute of Technology (Caltech), Pasadena, CA PhD (in progress), Geophysics |
| 2015-2019 | Indiana University (IU), Bloomington, IN BS Mathematics BS Geological Sciences |

Appointments

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| 2019-present | Graduate Student Researcher, Caltech Seismological Laboratory |
| 2019 | NAGT Summer Intern, United States Geological Survey, Golden, CO |
| 2015-2019 | STARS Undergraduate Research Assistant, IU Geophysics Laboratory |
| 2017 | IRIS Intern, Los Alamos National Laboratory, Los Alamos, NM |

Awards and Honors

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| 2020 | NSF Graduate Research Fellowship |
| 2019 | Faculty Senior Award, IU Geological Sciences |
| 2019 | Cora B. Hennel Memorial Scholarship, IU Mathematics |
| 2019 | Margaret Russell Edmondson Award, IU Phi Beta Kappa Chapter |
| 2017 | Undergraduate Prize, Mineralogical Society of America |

Teaching Experience

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| 2022 | Teaching Assistant, GE 165 – Geophysical Data Analysis, Caltech |
| 2022 | Instructor, Caltech Earthquake Fellows Program |
| 2021 | Teaching Assistant, GE 162 - Seismology, Caltech |

Service

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| 2022-present | Manuscript Reviewer, <i>Seismological Research Letters</i> |
| 2022 | Curriculum Developer / Instructor, Caltech Earthquake Fellows Program |
| 2021-2022 | Organizer, Caltech Seismological Laboratory Seminar |
| 2016-2019 | Editorial Board Member, <i>IU Journal of Undergraduate Research</i> |

Journal Publications

- [6] **Atterholt, J.**, Zhan, Z., and Yang, Y. Fault zone imaging with distributed acoustic sensing: body-to-surface wave scattering. *Journal of Geophysical Research: Solid Earth*, doi: 10.1029/2022JB025052
- [5] Yang, Y., Zhan, Z., Shen, Z., and **Atterholt, J.** (2022). Fault zone imaging with distributed acoustic sensing: surface-to-surface wave scattering. *Journal of Geophysical Research: Solid Earth*, doi: 10.1029/2022JB024329.
- [4] **Atterholt, J.** and Ross, Z.E. (2022) Bayesian framework for inversion of second-order stress glut moments: application to the 2019 Ridgecrest sequence mainshock. *Journal of Geophysical Research: Solid Earth*, doi: 10.1029/2021JB023780
- [3] **Atterholt, J.**, Zhan, Z., Shen, Z., and Li, Z. (2022) A unified wavefield partitioning approach for distributed acoustic sensing. *Geophysical Journal International*, doi: 10.1093/gji/ggab407
- [2] Yang Y., **Atterholt, J.**, Shen, Z., Muir, J.B., Williams, W.F., Zhan, Z. (2021) Sub-kilometer correlation between near-surface structure and ground motion measured with distributed acoustic sensing. *Geophysical Research Letters*, doi: 10.1029/2021GL096503
- [1] **Atterholt, J.**, Brownlee, S.J., and Pavlis, G.L. (2021). Direct P-wave anisotropy measurements at Homestake Mine: implications for wave propagation in the continental crust. *Geophysical Journal International*, doi: 10.1093/gji/ggaa416