
University of Michigan • Earth and Environmental Sciences
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EDUCATION

2019–present Ph.D. Earth and Environmental Science, University of Michigan
2015–2019 B.Sc. Environmental Earth Systems Science, Nanyang Technological
University, Singapore

PUBLICATIONS

- 4 (in preparation) Neo J. C, Huang, Y., Yao, D., Azimuthal Variation in Spectra of 2019 Ridgecrest Earthquake: Application to Fault Zone Imaging.
- 3 Neo J. C, Fan, W., Huang, Y., Dowling, D. R., Frequency-Difference Backprojection of Earthquakes, *Geophysical Journal International*, **23**, 1,234–1,245, doi: 10.1093/gji/ggac323, 2022.
- 2 Neo, J. C., Huang., Y., Yao, D., Wei, S., Is the Aftershock Zone Area a Good Proxy for the Mainshock Rupture Area? *Bulletin of the Seismological Association of America*, **111**, 424–438, doi: 10.1785/0120190200, 2021.
- 1 Ramos, D. M., Neo, J. C., Thakur P., Huang., Y., Stress changes on the Garlock fault during and after the 2019 Ridgecrest earthquake sequence, *Bulletin of the Seismological Association of America*, **110**, 1,752–1,764, doi: 10.1785/0120200027, 2020.

AWARDS AND GRANTS

- 2023 Student Travel Grant (American Geophysical Union)
- 2023 Barbour Scholarship (Rackham Graduate School, U-M)
- 2022 Rackham Travel Grant (Rackham Graduate School, U-M)
- 2021 Rackham Travel Grant (Rackham Graduate School, U-M)
- 2020 Rackham Travel Grant (Rackham Graduate School, U-M)
- 2020 Best Student Presentation Award (SSA Eastern Section Meeting)
- 2019 Best Student Presentation Award (SSA Eastern Section Meeting)
- 2019 Scott Turner Award (Dept. Earth & Env. Science, U-M)
- 2019 Departmental Fellowship (Dept. Earth & Env. Science, U-M)
- 2015 Nanyang Scholarship (NTU's foremost undergrad scholarship)

CONFERENCE ABSTRACTS

- 2023 Neo J. C, Huang, Y., Yao, D., Inferring Fault Zone Structure from the Azimuthal Variation in the Stacked P-Wave Velocity Spectra of Earthquake Clusters, *AGU Fall Meeting*, San Francisco, SF.
- 2023 (invited) Neo, J. C., W. Fan, Y. Huang, D. Dowling, Frequency-Difference Backprojection of Earthquakes, *Applied Inverse Physics*, Göttingen, Germany.
- 2023 Neo J. C, Huang, Y., Yao, D., Inferring Fault Zone Structure from the Azimuthal Variation in the Stacked P-spectra of Earthquake Clusters, *AGU Fall Meeting*, Puerto Rico, PR.
- 2022 Neo J. C, Huang, Y., Yao, D., Insights on fault damage zone structures from the azimuthal variation in the stacked spectra of earthquake clusters, *AGU Fall Meeting*, Chicago, IL.
- 2022 Liu, M., Neo, J. C., Huang, Y., Insights on earthquake source processes from the 2019 Ridgecrest earthquake source spectra and its azimuthal variation, *SSA Annual Meeting*, Bellevue, WA.
- 2021 Neo, J. C., W. Fan, Y. Huang, D. Dowling, Frequency-Difference Backprojection of Earthquakes, *AGU Fall Meeting*, New Orleans, LA.
- 2021 Neo, J. C., W. Fan, Y. Huang, D. Dowling, Frequency-Difference Backprojection of Earthquakes, *MGU Symposium*, virtual.
- 2020 Neo, J. C., W. Fan, Y. Huang, D. Dowling, Frequency-Difference Backprojection of Earthquakes, *AGU Fall Meeting*, virtual.
- 2020 Neo, J. C., W. Fan, Y. Huang, D. Dowling, Frequency-Difference Backprojection of Earthquakes, *SSA Eastern Section Meeting*, virtual.
- 2020 Huang., Y., Yao, D., Wei, S., Is the Aftershock Zone Area a Good Proxy for the Mainshock Rupture Area? *U-M Earth Department Fall Preview*, Ann Arbor, MI.
- 2019 Huang., Y., Yao, D., Wei, S., Is the Aftershock Zone Area a Good Proxy for the Mainshock Rupture Area? *SSA Eastern Section Meeting*, Columbus, OH.
- 2018 Huang., Y., Yao, D., Wei, S., Is the Aftershock Zone Area a Good Proxy for the Mainshock Rupture Area? *AGU Fall Meeting*, Washington, D.C.

TEACHING EXPERIENCE

- 2022 Graduate Student Instructor, EARTH-344 “Energy and the Environment” (Camp Davis). Handled the logistics and grading for an upper-level field course taught Dr. Adam Simon.
- 2021 Graduate Student Instructor, various mini courses. Responsible for grading and creating weekly summaries of students’ strengths, weaknesses, and feedback.
- 2020 Graduate Student Instructor, EARTH-296 “Topics in Earth and Environmental Science”. Worked with a team of GSIs and faculty to convert entry-level field courses to a virtual format, due to disruption from the COVID-19 pandemic. Led discussion sessions and contributed to the design of the syllabus and labs.
- 2020 Graduate Student Instructor, various mini courses. Responsible for grading and invigilating tests.

PROFESSIONAL EXPERIENCE

- Sep 2019–Present Graduate Research/Teaching Assistant at the University of Michigan. Responsibilities include conducting research, teaching classes and grading coursework.
- May–Jul 2023 Internship with Fathom Geophysics LLC. Utilized the SIMPEG geophysical software to conduct inversions of magnetic and gravity data to characterize fault planes.

OUTREACH, MENTORSHIP AND SERVICE

- 2023–24 American Geophysical Union Seismology Section Student Representative. Responsible for planning student and early-career events and fostering a community for Seismology students. Created the Seismology Students Discord server as a platform for students in Seismology to interact and share resources.
- 2022–23 President of GeoClub, a student-run organization for the U-M Earth department. In charge of running general meetings and executive board meetings. Responsible for coordinating the efforts of executive board members, overseeing all club operations, and communications with faculty and staff.
- 2022 AGU Fall Meeting Student Convener and Session Chair. Responsible for running the oral presentation session during the conference.
- 2022 Career Panel Events Committee Member. Responsible for reaching out to alumni and planning career panels for the U-M Earth department students.
- 2022 Earth Camp Instructor. Responsible for leading an interactive seismology workshop for high school students in Michigan.
- 2021 Michigan Geophysical Union Symposium Organizer. In charge of coordinating the judges and the student awards. Involved in planning and moderating the presentation sessions.
- 2021 Earth Camp Workshop Leader. Designed and led an interactive seismology workshop for high school students, who are from districts with historically low enrollment in earth science degree programs in Michigan.
- 2020–21 GeoClub Graduate Student Representative. Responsible for attending faculty meetings, summarizing key information, and disseminating it to the graduate student body. Planned and led the graduate student retreat to Beulah, MI.