# JING CI NEO

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# **EDUCATION**

University of Michigan, Ann Arbor (USA) *Ph.D. Pre-candidate, Earth and Environmental Science* Seismology Specialization

2019

Nanyang Technological University (Singapore) *B.Sc. Environmental Earth Systems Science* Geoscience Specialization CN Yang Scholars Program

# **RESEARCH EXPERIENCE**

### **Doctoral Researcher**

Department of Earth and Environmental Science, University of Michigan 2019 – Present

- Supervisors: Professor Yihe Huang
- Applying the frequency-difference method to earthquake backprojection to improve the accuracy of the results at higher frequencies

# **Undergraduate Researcher**

Overseas Final Year Project, University of Michigan

- Supervisors: Professors Yihe Huang and Shengji Wei
- Quantified the relationship between the mainshock rupture area and aftershock zone area
- Found that aftershock zone is slightly larger than the rupture area, and expands in time
- Demonstrated that Coulomb stress change is positively correlated to aftershock zone area

### Research Attachment, Nanyang Technological University

- Supervisors: Professor Sylvain Barbot and Dr. James Moore
- Modified the Green's functions of the strain inversion to remove isotropic strain, and verified the method with synthetic tests
- Produced a more accurate model of the Earth's viscosity in the Kumamoto region

### PUBLICATIONS

J. C. Neo, Huang, Y. Yao, D., Wei, S. (2020). Is the Aftershock Zone Area a Good Proxy for the Mainshock Rupture Area? Bulletin of the Seismological Society of America, 111 (1), 424-438

*Feb* – *May* 2017

2010

2024 (expected)

Jun – Dec 2018

Ramos, M.D., **Neo, J. C.**, Thakur P., Huang, Y. and Wei, S. (2020). Stress Changes on the Garlock Fault during and after the 2019 Ridgecrest Earthquake Sequence. Bulletin of the Seismological Society of America, 110, 4, 1752 – 1764

# AWARDS & HONORS

planning

<b>Best Student Presentation</b> Seismological Society of America, Eastern Section Meeting	2020
<b>Best Student Presentation</b> Seismological Society of America, Eastern Section Meeting	2019
Nanyang Scholarship NTU's foremost undergraduate scholarship	2015 –2019
GRANTS & FELLOWSHIPS	
<b>Rackham Conference Travel Grant, \$200</b> Rackham Graduate School, UoM	2020
<ul> <li>Scott Turner Award, \$1585</li> <li>UM Dept. of Earth and Environmental Sciences</li> <li>♦ Ranked in top 30% of proposals</li> </ul>	2019
TEACHING EXPERIENCE	
<ul> <li>Earth 296, Earth and Env. Science Around Us</li> <li>Graduate Student Instructor, UoM</li> <li>◆ Planning of curriculum and syllabus, some lab design, grading, and uploading quizzes. Held 2-hour discussion sections and office hours</li> </ul>	<i>Summer 2020</i> ng of
<ul> <li>ES3002, Structural Geology and Tectonics</li> <li>Undergraduate Teaching Assistant, NTU</li> <li>Graded assignments, assisted lab sessions, led a class demonstration and hele office hours</li> </ul>	<i>Winter 2019</i>
SERVICE & OUTREACH	
Organizing Committee Member Michigan Geophysical Union, University of Michigan ◆ Recruited and coordinated judges, moderated talks, participated in overall	2020-21

### **Graduate Student Representative**

Geoclub, University of Michigan

• Attend faculty meetings, contribute ideas from a graduate student's perspective, convey information to graduate student body

# CONFERENCE PRESENTATIONS

### **Oral Presentations**

- Neo, J. C., W. Fan, Y. Huang, D. Dowling, "Frequency-Difference Backprojection of Earthquakes", Seismological Society of America 2021
- Neo, J. C., W. Fan, Y. Huang, D. Dowling, "Frequency-Difference Backprojection of Earthquakes", Seismological Student Workshop 2020
- Neo, J. C., W. Fan, Y. Huang, D. Dowling, "Frequency-Difference Backprojection of Earthquakes", AGU Fall Meeting 2020
- Neo, J. C., W. Fan, Y. Huang, D. Dowling, "Frequency-Difference Backprojection of Earthquakes", SSA Eastern Section Meeting 2020
- Neo, J. C., Y. Huang, D. Yao, S. Wei, "Are Aftershocks a Good Proxy for the Mainshock Rupture Area?", SSA Eastern Section Meeting 2019

# **Poster Presentations**

Neo, J. C., Y. Huang, D. Yao, S. Wei, "Are Aftershocks a Good Proxy for the Mainshock Rupture Area?", AGU Fall Meeting 2018

# ADDITIONAL SKILLS

**Technical Skills:** Seismic Analysis Code (SAC), Generic Mapping Tools (GMT), ArcGIS **Programming Languages:** MATLAB (Proficient), Python (Intermediate) **Languages:** English (Native) and Mandarin (Intermediate)