

Curriculum Vitae

PERSONAL INFORMATION

Daniel Douglas
PhD Student
New Mexico Institute of Mining and Technology
Earth Sciences
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EDUCATION

- 08/2021–Present **Ph.D., Computational Geophysics**
New Mexico Institute of Mining and Technology, Socorro, NM, USA
Thesis: 3D Modeling of Dynamics in the Hikurangi-Kermadec Subduction System
Advisor: John Naliboff
Course Work: Subduction System Processes, Theoretical Seismology, Graduate Seminar
- 08/2019–08/2021 **M.Sc., Geophysics**
University of Hawaii at Manoa, Honolulu, HI, USA
Thesis: Magma-Assisted Flexure of Hawaiian Lithosphere Inferred From Three-Dimensional Models of Lithospheric Flexure and Active Source Seismic Data
Advisor: Garrett Apuzen-Ito
Course Work: Plate Tectonics, Geophysics I, Geophysics II, Submarine Volcanology, Mineralogy
- 09/2015–08/2019 **B.Sc., Physics and Astrophysics**
University of Toronto, Toronto, Canada
Thesis: Simulating Convection in a 3D Spherical Shell
Advisor: Julian Lowman
Course Work: Differential equations, Multivariable Calculus, Continuum Mechanics, Classical Mechanics, Electromagnetism

COURSE WORK

M.Sc. Plate Tectonics, Geophysics I, Geophysics II, Submarine Volcanology, Mineralogy
Ph.D. Subduction System Processes, Theoretical Seismology, Graduate Seminar

PROFESSIONAL EMPLOYMENT

- 2021–Present **New Mexico Institute of Mining and Technology**
Position: Research Assistant
- 2019–2021 **University of Hawaii at Manoa**
Position: Research Assistant

2018–2019 **University of Toronto**
Position: Teaching Assistant
Class: Introduction to Physics I and II

2017–2019 **University of Toronto**
Position: Facilitated Study Group Leader
Class: Introduction to Physics I and II

PUBLICATIONS

Conferences and Workshops

1. **11th ASPECT Hackathon**, 2024, CSU Mountain Campus, CO, USA
2. **1st WorldBuilder Hackathon**, 2024, Panama City, FL, USA
3. **3D Modeling of Dynamics in the Hikurangi-Kermadec Subduction System**, Oral presentation at AGU 2023 Fall Meeting in San Francisco, CA, USA
4. **Geodynamic Constraints on the Stability of Forearc Serpentine in the Cold Nose of the Mantle Wedge**, Poster presentation at AGU 2023 Fall Meeting in San Francisco, CA, USA
5. **10th ASPECT Hackathon**, 2023, Lincoln City, OR, USA
6. **CIDER 2023 Summer Program: Causes and consequences of fluid and magma transport at plate boundaries**, 2023, Berkeley, CA, USA
7. **PyLith Hackathon**, 2023, Golden, CO, USA
8. **3D Modeling of Dynamics in the Hikurangi-Kermadec Subduction System**, Poster presentation at AGU 2022 Fall Meeting in Chicago, IL, USA
9. **3D Modeling of Dynamics in the Hikurangi-Kermadec Subduction System**, Poster presentation at Ada Lovelace Workshop on Numerical Modeling of Mantle and Lithosphere Dynamics, Hévis, Hungary, 2022
10. **3D Modeling of Dynamics in the Hikurangi-Kermadec Subduction System**, Poster presentation at SEG-AGU Workshop, Seattle, WA, USA, 2022
11. **9th ASPECT Hackathon** 2022, Cody, WY, USA
12. **3D Modeling of Dynamics in the Hikurangi-Kermadec Subduction System**, Poster presentation at GeoPRISMs Workshop, Honolulu, HI, USA, 2022
13. **Magma-Assisted Flexure of Hawaiian Lithosphere Inferred From Three-Dimensional Models of Lithospheric Flexure and Active Source Seismic Data**, Poster presentation at AGU 2021 Fall Meeting in New Orleans, LA, USA
14. **8th ASPECT Hackathon** 2021 (virtual)
15. **Using 3D Geodynamic Models of Flexure Backed by Seismic Imagery to Constrain the Rheology and Thermal Structure of the Oceanic Lithosphere Under the Hawaiian Islands**, AGU 2020 Fall Meeting (virtual)
16. **7th ASPECT Hackathon** 2020 (virtual)

VOLUNTEERING

1. **Physics Aid Center Director/Tutor** University of Toronto 2017 – 2019
2. **GSA Earth Sciences Representative** University of Hawaii 2020 – 2021

HONORS, AWARDS & SCHOLARSHIPS

June 2024	CIG Travel Grant to attend the ASPECT Hackathon at Colorado State University, Mountain Campus
April 2024	Durtsche Award for Research in Geophysics
February 2024	CIG Travel Grant to attend the Worldbuilder Hackathon in Panama City, Florida
December 2023	GSA Travel Grant to attend AGU 2023 Fall meeting in San Francisco, California
September 2023 - February 2024	NSF INTERN Supplemental Funding Award for development of outer rise hydration model using PyLith
July 2023	CIG Travel Grant to attend 2023 ASPECT Hackathon in Lincoln City, Oregon
June 2023	Full funding to attend the 2023 CIDER Summer workshop in Berkeley, California
June 2023	CIG Travel Grant to attend 2023 PyLith Hackathon in Golden, Colorado
December 2022	GSA Travel Grant to attend AGU 2022 Fall meeting in Chicago, Illinois
September 2022	CIG Travel Grant to attend the Ada Lovelace workshop in Heviz, Hungary
July 2022	SEG Travel Grant to attend the SEG-AGU workshop in Seattle, WA
May 2022	CIG Travel Grant to attend the 9th ASPECT Hackathon in Cody, WY
March 2022	GSA Travel Grant to attend the GeoPRISMs workshop in Honolulu, HI
Dec 2020	Stefan Seyb SOEST Endowed Fund
Sept 2019	Graduated with Honours

September 24, 2024