# Liam D. Toney

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#### **EDUCATION**

**University of Alaska Fairbanks (UAF)** | *Fairbanks, AK* | May 2023 (expected)

Ph.D. in Geophysics

**Pomona College** | *Claremont, CA* | December 2017

B.A. cum laude in Physics; minor in Geology

**School for International Training** | Jaipur, Rajasthan, India | August 2015–December 2015

Sustainable Development and Social Change program

#### RESEARCH EXPERIENCE

**UAF Geophysical Institute** | *Fairbanks, AK* | August 2018–present

Graduate Research Assistant

**GNS Science** | Waikato, New Zealand | April 2018–May 2018

Ashfall Geovisualization Developer

Sandia National Laboratories (SNL) | Albuquerque, NM | June 2017—August 2017

R&D Intern, Geophysics Department

Incorporated Research Institutions for Seismology (IRIS) | Albuquerque, NM | June 2016–August 2016

Summer REU Intern (placement at SNL as part of the IRIS Undergraduate Internship Program)

#### TEACHING EXPERIENCE

**Breakthrough Collaborative** | *Birmingham, AL* | June 2015–July 2015

Teaching Fellow

Pomona College | Claremont, CA | January 2014–May 2016

Teaching Assistant, Physics Department

#### **PUBLICATIONS**

**Toney, L. D.**, Fee, D., Allstadt, K. E., Haney, M., & Matoza, R. S. (in review). Reconstructing the dynamics of the highly-similar May 2016 and June 2019 Iliamna Volcano, Alaska ice—rock avalanches from seismoacoustic data. *Earth Surface Dynamics Discussions*. https://doi.org/10.5194/esurf-2020-47

**Toney, L. D.**, Abbott, R. E., Preston, L. A., Tang, D. G., Finlay, T., & Phillips-Alonge, K. (2019). Joint body-and surface-wave tomography of Yucca Flat, Nevada using a novel seismic source. *Bulletin of the Seismological Society of America*, 109(5), 1922–1934. https://doi.org/10.1785/0120180322

#### **CONFERENCE PRESENTATIONS**

Fee, D., **Toney, L. D.**, Matoza, R. S., Sanderson, R. W., Haney, M., Lyons, J. J., Iezzi, A. M., Kim, K., De Angelis, S., Diaz Moreno, A., & Jolly, A. D. (2019). A framework for improved infrasound back-projection on local and regional scales. Abstract S41E-0577 presented at *2019 AGU Fall Meeting*, San Francisco, CA, 9–13 Dec. (poster)

**Toney, L. D.**, Fee, D., Allstadt, K., Haney, M., & Matoza, R. S. (2019). A tale of two very large avalanches: Probing the limits of seismoacoustic avalanche characterization on Iliamna volcano, Alaska. Abstract S23D-0658 presented at *2019 AGU Fall Meeting*, San Francisco, CA, 9–13 Dec. (poster)

**Toney, L. D.**, Fee, D., Haney, M., Matoza, R. S., & Allstadt, K. (2019). Seismoacoustic insights from the May 22nd, 2016 Iliamna volcano rock and ice avalanche. Abstract 47 presented at *2019 SSA Annual Meeting*, Seattle, WA, 23–26 April. (poster)

**Toney, L. D.**, Abbott, R. E., & Preston, L. A. (2017). Joint body-and surface-wave tomography of Yucca Flat, Nevada. Abstract S33A-0854 presented at *2017 AGU Fall Meeting*, New Orleans, LA, 11–15 Dec. (poster)

**Toney, L. D.**, Abbott, R. A., Knox, H. A., Preston, L. A., & Hoots, C. R. (2016). Surface-wave tomography of Yucca Flat, Nevada. Abstract S51A-2744 presented at *2016 AGU Fall Meeting*, San Francisco, CA, 12–16 Dec. (poster)

### **HONORS & AWARDS**

#### **Honorable Mention**

John Hunter Excellence in Plotting Contest, SciPy 2020

#### **Distinction in the Senior Exercise**

Physics Department, Pomona College

#### **Pomona College Scholar**

Pomona College

### **Tileston Physics Prize**

Physics Department, Pomona College

#### PROFESSIONAL AFFILIATIONS

**American Geophysical Union** | 2016–present

**Seismological Society of America** | 2019–present

#### **SERVICE**

#### Referee

Surveys in Geophysics

**Vice President** | May 2020–present

Geophysical Institute Graduate Student Association (GIGSA)

**Treasurer** | April 2019–May 2020

**GIGSA** 

## **TECHNICAL SKILLS**

## Coding

- Python
- MATLAB
- R
- Shell scripting
- GMT
- GDAL
- LATEX
- Git
- HTML + CSS

#### **Software**

- ArcGIS
- Adobe Illustrator + InDesign + Photoshop + Lightroom
- GitHub
- macOS
- Windows

## **FIELDWORK**

Date	Duration	Activity	Location	Role
July– August 2019	4 weeks	Seismic and infrasound station installation/maintenance	Adak/Atka/Chuginadak/Umnak islands, Alaska, USA	Assistant
April 2018	1 day	Volcanic gas flux measurement	White Island, New Zealand	Assistant
April 2018	2 days	Microgravity survey	Mount Tongariro, New Zealand	Assistant
February 2018	1 week	Seismic deployment	Southland, New Zealand	Assistant
July 2016	1 week	Active-source seismic survey	Nevada National Security Site, Nevada, USA	Assistant