

# ALAN J. YU

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## Skills

- Geospatial data mapping with *Esri ArcGIS* and *Oasis Montaj*.
- Geophysical data analysis and modelling with *Leapfrog* and *Python*.
- Project and data management with *Git* and *SQL*.
- Academic and professional writing and typesetting with *LaTeX*.
- Field knowledge and experience.

## Education

### Specialist in Environmental Physics

Expected 2023

Honours Bachelor of Science, University of Toronto

**Notable Courses:** Planetary Geophysics, Planetary Astrophysics, Mineralogy, Petrology, Sedimentology and Stratigraphy, Structural Geology, Glacial Geology, Scientific Computing, Classical Mechanics.

## Experience

### Geophysicist

Toronto, ON

Abitibi Geophysics, Co-op

Jan 2022–

- Mapped preliminary magnetic, induced polarization, and gravity surveys data in Oasis Montaj.
- Developed map templates and control files for streamlined, standardized map output.
- Migrated past geophysical projects that use obsolete modules.

### Researcher

Toronto, ON

University of Toronto, Project

Fall 2021

- This research project was supervised by Professor *Nick Eyles*.
- Investigated intraplate earthquakes in *western Quebec* based on seismo-acoustic reflection profiles of deformed sedimentary structures below the floor of Lake Simard, Timiskaming, Quebec.
- 3D visualization and analysis of cross-section stratigraphic sequences using *Blender* to determine the extent and chronology of the deformation structures.

### Research Assistant

Toronto, ON

University of Toronto, Co-op

Summer 2021

- This research position was supervised by Professor *Nick Eyles*.
- Trained for high-resolution Li-DAR digital data processing and imaging of glacial geological features (e.g., drumlins, glacial lineations, moraines) and assisted with establishing the glacial history and dynamics based on their remnant structures.
- Assisted with an ecology survey of invasive golden-rods in the Rouge National Urban Park.
- Assisted with capturing *mega-grooves* near Odessa for photogrammetry 3D models.
- Assisted with a *seismic survey* to test equipment near the Miller Lash house.
- Captured media for *e-Learning Ontario* in a two-week road trip around the Georgian Bay, Ontario.

## Awards

<b>NSERC Undergraduate Student Research Award</b> <i>Natural Sciences and Engineering Research Council, Government of Canada</i>	2021
<b>CRESS Summer Research Award</b> <i>Centre for Research in Earth System Science, University of Toronto</i>	2021 & 2022
<b>Don Salt Memorial Scholarship</b> <i>University of Toronto &amp; Canadian Exploration Geophysics Society</i>	2022
<b>University Entrance Scholarship</b> <i>University of Toronto</i>	2018

## Miscellaneous

<b>Class 5 Driver's License</b> <i>Saskatchewan Driver's Licensing and Vehicle Registration</i>	2017–
<b>Pleasure Craft Operator Card</b> <i>Transport Canada</i>	2021–
<b>Basic Operator of Remotely Piloted Aircraft Systems</b> <i>Transport Canada</i>	2021–