

# Alan J. Yu

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## Summary

I am a fourth-year undergraduate student in the Specialist and Co-op program of Environmental Physics at the University of Toronto Scarborough. My notable skills include:

- Proficiency in Geographic Information Systems (e.g., *ESRI ArcGIS*).
- Proficiency in professional writing and typesetting with *LaTeX*.
- Proficiency in data analysis and geophysical modelling with *Excel* and *Python*.
- Proficiency in project and data management with *Git* and *SQL*.
- Solid field knowledge and experience.

## Education

### Specialist (Co-op) in Environmental Physics

2018-2023

*Honours Bachelor of Science, University of Toronto*

Notable Courses: Mineralogy, Sedimentology, Petrology, Glacial Geology, Planetary Astrophysics, Planetary Geophysics, Scientific Computing, Classical Mechanics, Multi-variable Calculus, Differential Equation.

## Experience

### Geophysicist

Toronto, ON

*Abitibi Geophysics, Co-op*

Jan 2022–

- Analysis and visualization of preliminary geophysical data (e.g., induced polarization, magnetic field, etc.) using *Geosoft Oasis Montaj*.
- Template and macro development for streamlined production and standardized output.
- Update and migration of older projects with 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 sub-bottom seismoacoustic reflection profiles of deformed sedimentary structures in Lake Simard, Timiskaming, Quebec.
- Multidimensional analysis and visualization of cross-section stratigraphic sequences with *Blender* to determine the extent and chronology of the observed deformed structures.

### Research Assistant

Toronto, ON

*University of Toronto, Co-op*

Summer 2021

- This research opportunity was supervised by Professor *Nick Eyles*.
- Trained for high-resolution Li-DAR digital data processing and imaging of glacial geological features (e.g., drumlins, lineations, moraines, etc.) and assisted with establishing glacial history and glacier dynamics based on their remnant landforms.
- Assisted with an ecology survey of invasive golden-rods in the Rouge National Urban Park.

- Assisted with drone captures of **mega-grooves** near Odessa for Photogrammetry 3D models.
- Assisted with a **seismic survey** to test equipment near the Miller Lash house at the Scarborough campus of the University of Toronto.
- Captured media content for **e-Learning Ontario** by completing a two-week road trip around the Georgian Bay, Ontario.

## Developer & Webmaster

*Way-Way Housewares, Part-time*

Saskatoon, SK

2018-2019

- Designed and launched a modern e-commerce platform via Wordpress with custom javascripts.
- Ensured that the website is operating correctly and examined traffic through the site.

## Honours & Awards

### NSERC Undergraduate Student Research Award

*Natural Sciences and Engineering Research Council of Canada*

Jul 2021

### CRESS Summer Research Award

*Centre for Research in Earth System Science, University of Toronto*

Apr 2021

### University Entrance Scholarship

*University of Toronto*

Sept 2018

## Miscellaneous

### Class 5 Driver's License

*Saskatchewan Driver's Licensing and Vehicle Registration*

2017–

### Pleasure Craft Operator Card

*Transport Canada*

2021–

### Basic Operator of Remotely Piloted Aircraft Systems

*Transport Canada*

2021–