Alan J. Yu

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Expertise

- Geospatial data mapping with Esri ArcGIS and Oasis Montaj.
- Data analysis and geophysical 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.

Experience

Geophysicist Toronto, ON
Abitibi Geophysics, Co-op Jan 2022–

Mapping of magnetic survey and induced polarization data.

- Development of templates and control files for streamlined, standardized map output in Oasis Montaj.
- · Migration of 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 sub-bottom seismo-acoustic reflection profiles of deformed sedimentary structures in Lake Simard, Timiskaming, Quebec.
- 3D visualization and analysis based on the cross-section stratigraphic sequences with Blender to determine the extent and chronology of those 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, lineations, moraines, etc.) and assisted with establishing glacial history and glacier 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.

Education

Specialist in Environmental Physics

Expected 2023

Honours Bachelor of Science, University of Toronto

Notable Courses: Planetary Geophysics, Planetary Astrophysics, Mineralogy, Petrology, Sedimentology, Structural Geology, Glacial Geology, Scientific Computing.

Honours & Awards

Don Salt Memorial Scholarship Department of Earth Sciences, University of Toronto NSERC Undergraduate Student Research Award Natural Sciences and Engineering Research Council, Government of Canada CRESS Summer Research Award Centre for Research in Earth System Science, University of Toronto University Entrance Scholarship University of Toronto	Mar 2022 Jul 2021 Apr 2021	
		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–	