

Alan J. Yu

Environmental Physics Specialist, University of Toronto
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Summary

- Extensive knowledge in various aspects of environmental science from the Environmental Physics Specialist program.
- Competent experience with Geographic Information Systems (e.g., QGIS).
- Proficiency in *LaTeX*, *Office suite*, *Matlab* and *Python*.
- Proficiency in data analysis and computational modelling.
- Robust intuition and field analysis skills.
- Solid communication and organization skills.

Education

Specialist in Environmental Physics

2018-2023

Honours Bachelor of Science, University of Toronto at Scarborough

Relevant Courses

Intermediate Physics Laboratory

Fall 2019

- Detailed reports of the behaviour of various circuits, endorsed by the lab coordinator.

Hydrology

Fall 2019

- Analyzed the annual precipitation data near a university on Excel with error analysis.
- Estimated mean precipitation using Thiessen polygons isohyetal and hyetograph graphs and predicted monthly evapotranspiration using Thornthwaite's method.

Glacial Geology

Fall 2020

- Wrote a review paper regarding recent advancements in understanding Martian glaciers, endorsed by the instructor.
- Researched and presented a virtual informative field trip to the Athabasca glacier.
- Mapped out drumlins and analyzed their distribution in Southern Ontario from satellite imagery.

Scientific Computing

Fall 2020

- Data import, export, analysis and storage on the *Jupyter* environment.
- Applications of Fourier Transform, numerically-computed differentiation and integration, numerical integration of partial differential equations, and hydrodynamic simulations .

Geophysics

Fall 2020

- Computation of ocean ridge temperature and surface flux throughout time and depth with 1-D heat equation.
- Computation of the density of Earth's interior in varying depths from P-wave and S-wave velocity.
- Computation of Earth's magnetic field direction.

Experience

Front-end Developer

Way-Way Housewares, Part-time

Saskatoon, SK

2018-2019

- Launched an e-commerce website with an intuitive product management system in two weeks.
- Assisted clients' product inquiry through email and phone.

Admissions Student Mentor

University of Toronto at Scarborough, Volunteer

Toronto, ON

Spring 2021

- Provided guidance for life experience and future paths to newly admitted students.

Awards & Certifications

Entrance Scholarship

University of Toronto at Scarborough

Fall 2018

Class 5 Driver's License (Full)

Saskatchewan Driver's Licensing and Vehicle Registration

Since 2017