

Alan J. Yu

Environmental Physics Specialist, University of Toronto

Contact

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Summary

- Competent knowledge across the subjects of biological, chemical, physical, and environmental science and policies to air, waste, land, and water, developed through the Specialist program in Environmental Physics.
- Competent experience with Geographic Information Systems (e.g., QGIS) to conduct data and spatial trend analysis, acquired from glacial landforms mapping.
- Proficiency in writing manuscripts and reports with LATEX, and Office suite programs and representing results graphically with MATLAB developed through research and laboratory sessions.
- Proficiency in data analysis and result presentation using PYTHON, proven through formal laboratory reports.
- Robust intuition and field analysis skills as an environment enthusiast demonstrated from *in situ* geological research.
- Solid communication and organization skills developed from experience in administrating and customer service fields and flexibility due to efficient time management.

Education

Candidate, Honours Bachelor of Science

2018-2022

University of Toronto

- Sophomore specialist (Co-operative stream) in Environmental Physics.

Relevant Courses

Introductory Biology

Fall 2018

- Thoroughly evaluated the effectiveness of various water plants' photosynthesis process by analyzing the concentration of oxygen in each sample tube.
- Correctly concluded the experiment with the Surprise Principle (i.e., rejecting the null hypothesis and proving the alternative hypothesis).

Introductory Environmental Science

Fall 2018

- Thoroughly analyzed physical, chemical, and biological properties (e.g. E. Coli. concentration, pH, electrical conductivity, and hardness) of our water sample collected from the Highland Creek Watershed.

Intermediate Physics Laboratory

Fall 2019

- Extensively studied the behaviours of various circuits, applied practically during laboratory sessions and collected ample data for analysis.
- Detailed written reports with data analysis and graphical illustration of the behaviour of physical systems endorsed by the Laboratory Coordinator.

Hydrology

Fall 2019

- Thoroughly analyzed the annual precipitation data near a University using Excel, with scatterplots and error analysis.
- Correctly estimated mean precipitation with Thiessen polygons isohyetal and hyetograph graphs and predicted monthly evapotranspiration using Thornthwaite's method.

Earth History

Fall 2019

- Conducted an *in situ* research of sediments and glacial activities near Hamilton and concluded a plausible geological history of Southern Ontario.

Statistics

Winter 2019

- Competent knowledge of statistical distribution and probability, in company with various analysis techniques strengthened by work sessions.

Glacial Geology

Fall 2020

- Researched recent advancement in glaciation on Mars comprehensively and written a thorough review paper.
- Mapped out the glacial landforms using digital imagery (QGIS) in an online laboratory exercise.

Experience

Dennis' Your Independent Grocery

Saskatoon, SK

Cashier & Customer Service, Part-Time

2017-2018

- Aside from cashier's duty, assisted customers by explaining or recommending items and processing exchanges or refunds.
- Resolved customers' conflict professionally with zero complaints.

Way-Way Housewares

Saskatoon, SK

Front-end Developer & Customer Service, Part-time

2018-2019

- Launched a professional e-commerce web site with an intuitive product management system in two weeks.
- Communicated effectively in-person to accommodate the employer's need.
- Optimized and organized product images for web performance, and reduced clutter and loading time by half.
- Assisted clients satisfactorily by email and phone with their product inquiries.

Canadian Math Kangaroo Contest

Toronto, ON

Exam Invigilator, Volunteer

Spring 2019

- Comforted students' stress and boredom during the exam and provided participants with a distraction-free environment.
- Ensured the exam to carry out successfully with no academic offences.

Awards & Certifications

Entrance Scholarship

Fall 2018

University of Toronto at Scarborough

- Scholarship amounted \$1500 due to excellent academic performance.

Class 5 Driver's License

Since 2017

Saskatchewan Driver's Licensing and Vehicle Registration

- Permission to operate Class 5 vehicles (see the full list at sgi.sk.ca).
- Equivalent to full operating licenses for passenger vehicles in all Canadian provinces.