

## Education

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### MSc MATHEMATICS AND STATISTICS WITH A SPECIALIZATION IN BIOSTATISTICS

University of Alberta – Edmonton, AB

September 2024 - Present

**Relevant Coursework:** Biostatistics, Epidemiology Methods, Methods of Statistical Inference.

### BSc WITH SPECIALIZATION IN STATISTICS

University of Alberta – Edmonton, AB

September 2019 - June 2023

**Major:** Statistics

Dean's Honor Roll - Fall/Winter 2022 -2023

**Relevant Coursework:** Applied Statistical Methods, Mathematical Statistics, Calculus, Linear Algebra, Probability and Stochastic Processes, Population Genetics, Sampling Techniques, Computing for Data Science, Regression Analysis, Design and Analysis of Experiments, Data Mining.

## Skills

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- R (ggplot2, plotly, dplyr, caret, E1071, knitr, xml)
- Python (Pandas, NumPy, SciPy, Matplotlib, Seaborn, StatsModels, PyGam)
- LaTeX
- SQL (SQL Server)
- HTML and CSS
- XML, XPath, and XSLT
- Power BI
- MS Office Suite including Excel (VLookup, Conditional Formatting, Pivot Tables)
- Technical report writing
- Problem solving
- Project planning and management

## Work Experience

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### IELTS

Exam Invigilator (Contract)

February 2023 – Present

Edmonton, AB, Canada

- Collaborated with a team of 2-4 individuals to efficiently register and supervise test takers, and effectively facilitated the distribution of materials and exams.
- Maintained the accuracy of test-takers information during the registration process.
- Demonstrated exceptional organizational skills and attention to detail in providing timely support to test takers.

### TUTORING

Tutor (Casual)

February 2023 – Present

Edmonton, AB, Canada

- Prepared notes and material to cover during tutoring sessions.
- Assisted students in understanding first year math and statistics concepts including linear algebra, probability, linear regression, ANOVA, sampling methods, and hypothesis testing.
- Actively listened to students and tailored the content of the sessions to the learning style of students.
- Helped students understand and apply R for data analysis.

### GOVERNMENT OF ALBERTA (MINISTRY OF TECHNOLOGY AND INNOVATION)

Digitization Specialist (Full-Time)

September 2023 – August 2024

Edmonton, AB, Canada

- Worked in a collaborative environment where I was responsible of digitizing legal files, entering and maintaining qualitative and quantitative data related to the files into **Microsoft Excel**, cleaning data, and transforming **Microsoft Excel** files into **XML** to upload to a repository.
- IM Analyst support and backup.
- Contributed to improving the process of digitizing government records by creating a shared platform in **Microsoft Excel** that tracked boxes of filed records through the different steps of digitization. This process also facilitated audits and the collection of data used for analysis.

- Analyzed data recorded during the digitization process from the last quarter of 2023, optimized communications, prioritized the digitization of files based on client's requests, and helped in the process of training new associates by doing workshops contributing to maintaining efficient workflows.

## AMAZON

Area Manager Intern (Full-Time, Contract)

June 2022 – August 2022  
New Westminster, BC, Canada

- Worked with a team of 3-5 managers on-site to write audits, optimize production, and manage associates in a strategic way to meet set goals.
- Created a report as part of an internship project where I researched and analyzed data in relation to package errors in the shipping area of the YVR3 facility. Used **R** and **Microsoft Excel** to clean and manipulate data to find the root cause of the problem and suggest methods to decrease the number of package errors.
- Used **Microsoft Word**, **PowerPoint**, and **Lucidchart** to create an internship project report and presentation to stakeholders.

## AMERICAN EAGLE OUTFITTERS

Sales Associate (Part-time)

August 2021 – June 2022  
Edmonton, AB, Canada

- Worked in a collaborative setting organizing items in the store and used the Point of Service (POS) system to handle transactions.
- Worked with managers to identify and address challenges in sales by receiving customer feedback, handling customer issues, assisting customers, and communicating promotions to meet sales targets.

## EXPLORE EDMONTON

HR Assistant (Full-time, Contract)

July 2021  
Edmonton, AB, Canada

- Used Human Resources Information Systems (HRIS) including ADP to input and retrieve data, maintain employee records, and ensure data accuracy and confidentiality.
- Worked in a collaborative environment creating contracts, files, and the registration of employees into the payroll system.
- Reconciled employee discrepancies in employee records, and used **Microsoft Excel** to input data, create **pivot tables**, and conduct data audits.

## Projects

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[ENZYMATIC BREAKDOWN OF LACTOSE INTO GLUCOSE IN COWS MILK](#) – Class Group Project – Edmonton, AB December 2021

- Performed an experiment where we aim to establish whether there is a particular brand of lactase tablets that is more effective at enzymatically catalyzing lactose in milk under different fat content and time constraints.
- For the experiment, we used a Latin Square Design to test and control for two blocking factors and a treatment factor.
- Used **R Studio** to conduct an analysis of variance and analysis of significant factors through pairwise comparisons.

[ESTIMATING THE AREA OF NATIONS](#) – Class Group Project – Edmonton, AB May 2023

- Used **R Studio** to create an algorithm that, given a country's name as input, estimates the area of nations along with a 90% confidence bound. The algorithm achieves this through search phases that simulate latitude and longitude points, and using a lookup table matches these points to the country of interest to obtain latitude and longitude bounds that capture the country of interest. With the bounds found through the search phases, we used Monte Carlo sampling and a sinusoidal projection to obtain the estimate of the area and 90% confidence bounds.
- A report was created through **R Markdown** and flowcharts of the algorithm were created through **Lucidchart**.
- A [revision of this project](#) was later done where I found that using volume integration to find the area of a spherical rectangle instead of a sinusoidal projection improved the algorithm's estimation.

[OPTIMIZING THE ACKLEY FUNCTION AND MODELING THE NILE RIVER](#) – Class Assignment – Edmonton, AB April 2023

- Used **R Studio** and **R Markdown** to create a two-part report where I optimize the Ackley function and model the Nile River using the Robins-Monro Algorithm.
- Optimizing the Ackley function was done by using a search domain consisting of a hypercube in  $d = 2, 4$ , and 6 dimensions, and using the three basic search methods of SRS, LRS, and ELRS.
- Modeling the Nile River was done using the **R Nile** dataset, a gradient loss function, and the Robins-Monro Algorithm at  $d = 2, 4$ , and 6 dimensions.