

Tariq Cisse

Seattle, WA | 437-984-4539 | cissetariq@gmail.com

EDUCATION

University of Washington

Candidate, Master of Science in Biostatistics

Seattle, WA

September 2025 – March 2027

University of Toronto

Honours Bachelor of Science in Statistics, with High Distinction

Toronto, ON

September 2021 – April 2025

- Dean's List: 2022, 2023, 2024, 2025
- Coursework in Advanced Machine Learning and Data Mining, Statistical Inference, Probability, Stochastic Processes, Multivariate, Time-Series, Regression and Survival Analysis, etc...

WORK EXPERIENCE

Dalla Lana School of Public Health, University of Toronto

Toronto, ON

Research Assistant, Spatial Data Analysis | R, Python, PowerQuery, MS Office, GIS

September 2024 – April 2025

- Assisted the Geoinformatics of Spatial and Environmental Health Laboratory (Ge-iSEE) with (spatial) data analysis and statistical modeling of population health indicators.
- Developed data cleaning, processing, validation, reconciliation and mapping engines for spatial data on air pollution, vegetation health and other environmental factors in Ontario.
- Performed literature screenings and reviews to assess and evaluate various study designs and statistical modeling methods.

Financial Services Regulatory Authority of Ontario (FSRA)

Toronto, ON

Risk Analyst (Co-op) | Python, SQL Server, Power BI, PowerQuery, DAX, MS Office

January – August 2023

- Raised efficiency in production of quarterly reports and improved consistency of risk analytics insights by leading data visualization processes as well as performing database management, validation, reconciliation and query resolution tasks to support internal deterministic model.
- Regularly provided critical insights and, performed and documented stochastic projections with internal model for the production of sector reviews, risk appetite statements and inaugural yearly report.
- Supported statistical analysis project to inform strategies with new investment manager by processing and analyzing data on various capital market variables.

PROJECTS

German Breast Cancer Study Group

April 2025

- Investigated effect of hormonal therapy on recurrence-free survival of 686 cancer patients.
- Analyzed patients' survival data by producing Kaplan-Meier curves, Stratified Cox Proportional Hazards (PH) model and Weibull parametric model with Gamma frailty, adjusting for age, tumor size and grade, hormones, etc..
- Built and validated models using stepwise procedures, scaled Schoenfeld, Martingale and deviance residuals, log-log plots and Likelihood Ratio Tests.

Child Mind Institute - Severity Impairment Index

March – April 2025

- Machine Learning project facilitated by the Child Mind Institute for better understanding and prediction of problematic internet use among children and teens, and assessing of their mental health and anxiety.
- Trained XGBoost, Random Forrest and Support Vector Machine (SVM) classifiers with data from demographic, physical activity and mental health indicators, and using Quadratic Weighted Kappa (QWK) as metric.
- Combined all three models into a Logistic Regression classifier for robustness and achieved very competitive results in comparison to top submissions in corresponding Kaggle competition (Top 8%).

Analysis of Hero Rats' Sensory Preferences

May – August 2024

- Statistical modeling and summer research project under Professor's supervision analyzing rats' odor preferences for TNT and Chamomile based on early-age exposure to these scents and training for detection of landmines and tuberculosis. Project was later presented at UofT Scarborough's 2024 Undergraduate Research Symposium.
- Performed an Exploratory Data Analysis (EDA) including Reliability measures and Principal Component Analysis.
- Concluded by fitting Bayesian Linear Mixed-Effect Model (LMM) and performing Posterior Predictive Checks.

TECHNICAL SKILLS AND OTHER

Languages: R, Python, SQL, DAX, C

Tools and Libraries: pandas, NumPy, SciPy, scikit-learn, Matplotlib, seaborn, TensorFlow, PyMC, SQL Server, PowerQuery, MS Office, tidyverse, dplyr, ggplot, jupyter, R Markdown, LaTeX, GIS

Other: Bilingual (fluent in English and French)