Cameron Kerr

EDUCATION

University of Waterloo , Waterloo — MMath

September 2025 - PRESENT

Incoming masters student in the Applied Mathematics department specializing in control and dynamical systems apart of the Bauch lab. Ontario Graduate Scholarship recipient.

University of Toronto, Toronto — *HBSc*

September 2021 - April 2025

Maored in Mathematics, Quantitative Biology and minored in Statistics.

EXPERIENCE

Bauch Lab, University of Waterloo - Student Researcher

May 2025 - PRESENT

Conducting research at the Bauch Lab involving dynamical systems and agent-based modelling of human-environment systems. Focusing on coupled opinion dynamics and climate models. Started reading group focusing on replicator dynamics and evolutionary game theory..

School of Cities, University of Toronto - Research Assistant

September 2024 - April 2025

Analyzed mobile location data to determine daily patterns of activity in cities across North America. Used SQL, and Python for data extraction and transformation. Developed visualizations using R, ArcGIS, and QGIS. Assisted in creating a report to display the results: https://schoolofcities.github.io/urban-activity-atlas/exploring-hourly-activity-toronto.

Frederickson Lab, University of Toronto —Student Researcher

September 2023 - August 2024

Examined 16S data sets derived from Duckweed microbiomes to investigate shifts in microbiome composition over time and over the rural-urban gradient. Developed a manuscript for the project which is currently being reviewed by the lab. Used comparative genomic techniques to analyze synteny and coverage for triploid Duckweed genome assemblies.

Princess Margaret Cancer Research Centre, Toronto —Student Researcher

July 2019 - September 2023

First author on a research project currently under review for submission. The project tracked the T cell repertoire of 9 melanoma patients throughout adoptive cell transfer using genetic sequencing data extracted from blood draws. Ran data analysis in Bash, R, and Python. Presented the research at the Trans-Atlantic Journeys in Cell and Gene Therapy put on by the University of Manchester and the University of Toronto in November 2020. Preprint is available at: https://www.medrxiv.org/content/10.1101/2025.01.17.24311574v1

VOLUNTEERING

West Park Hospital, Toronto - Clinical records and recreational therapy volunteer

June 2023 - September 2023

Aided in digitizing clinical records for all patients in the hospital. Assisted in recreational therapy for patients as well as directing patients and visitors throughout the hospital.

GLO Sanctuary, Manitowaning - Animal shelter volunteer

August 2023

Cleaned stalls, picked paddocks, washed baths and bowls, and helped provide care for animals at an animal sanctuary on Manitoulin Island.

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LinkedIn:

https://www.linkedin.com/in/camer

on-kerr-457030170/

Personal website: https://camhkerr.com/

SKILLS

R

Python

SQL

Unix / Linux

MATLAB

ArcGIS / QGIS

Academic writing

Data analysis

Mathematical modeling

HTML / CSS