Nathan Cantafio

nathancantafio.com | nathan.cantafio@stat.ubc.ca | nathan-cantafio | nathan-cantafio

Education

M.Sc. Statistics — University of British Columbia — 2025–Apr2027

B.Sc. Combined Honours, Mathematics and Statistics — University of British Columbia — 2020–2025

Skills

Statistical Methods Regression & GLMs, mixed-effects models, experimental design, Bayesian methods

Software R (tidyverse, ggplot2), Stan, Python, Git/GitHub, LaTeX, Excel

Experience

Co-op Student — May 2026 – Dec 2026

Health Canada

- Implemented a pre-specified analysis plan for a public health study, applying chemical mixture models to estimate the joint effects of multiple exposures, with a team of statisticians and subject-matter experts.
- Handled missing covariate data using MICE, pooling results across imputed datasets.
- Wrote methods documentation that holds up to statistical review while remaining clear to non-statisticians.
- Preparing results for presentation at the Health Canada Science Forum.

Junior Statistical Consultant — Mar 2026 – Present

Applied Statistics and Data Science Group (ASDA), UBC

- Consulted with researchers across disciplines (including health sciences, forestry, ocean sciences, and information studies), turning their research goals into well-defined statistical questions and recommending appropriate study designs and analyses.
- Carried out analyses in R for client projects, from exploratory data visualization to formal modelling, preferring the simplest model that answers the research question.
- Wrote reports setting out recommended methods, their assumptions, and their limitations in plain language.

Graduate Teaching Assistant — Sep 2025 – Present

UBC Department of Statistics (STAT 305 Statistical Inference, STAT 302 Introduction to Probability)

- Held office hours, led weekly labs, and contributed to exam development across undergraduate courses.

First Generation Student Mentor — Jan 2026 – Apr 2026

University of British Columbia

- Provided academic guidance and professional development support to undergraduate students.

Undergraduate Summer Research Assistant (NSERC USRA) — May 2025 – Aug 2025

UBC Department of Statistics, supervised by Prof. Geoff Pleiss

- Studied Gaussian processes and Bayesian optimization using Python on Compute Canada HPC clusters.

Projects

Fare Share Policy Evaluation — github.com/nathan-cantafio/fare-share

STAT 547D Class Project

- Estimated the effect of Seattle's ride-share driver pay ordinance on transit ridership using Bayesian synthetic control in Stan, with placebo and sensitivity analyses.

Pandemic Simulation Experiment — github.com/nathan-cantafio/pandemic-simulation

STAT 404 Class Project

- Designed a simulation experiment to assess policy effectiveness in preventing disease spread.

Statistics Blog — nathancantafio.com

Personal Project

- Long-form posts that examine the assumptions behind common statistical methods.

Awards

Constance van Eeden Scholar Award — University of British Columbia — 2025

NSERC Undergraduate Student Research Award (USRA) — University of British Columbia — 2025