

# Shivam Badkas

+1(647) - 636 - 8628 • shivambadkas@gmail.com • shivambadkas.com

## EDUCATION

**University of Toronto** | Honours BSc. Double Major in Statistics and Global Health, Mathematics Minor June 2020

- Relevant Courses: Multiple Linear Regression, Methods of Data Analysis, Design and Analysis of Experiments, Sampling and Observational Data, Probability, Bayesian Analysis, Global Health Policy

## SKILLS

- Adept at using various technologies for **data wrangling, cleaning, visualisation, and analysis**

R | Python | MySQL | Tableau | Microsoft Excel | SAS | Google Analytics | Amazon Web Services | Julia | INLA

## EXPERIENCE

**Tutor** April 2020 - Present  
University of Toronto | Toronto, Canada

- Instructed students enrolled in statistics, biostatistics, and ecology statistics courses and improved grades by ~15%
- Utilized R to teach time series, data collection, data organizing, data visualisation, population modelling and trajectory, multiple linear regression, generalized linear models, linear mixed effect models, PCA, ANOVA, and hypothesis testing
- Used multiple libraries and softwares including; ggplot, tidyverse, nlme, dplyr, markdown, tidyr, knitr, and RStudio

**Data Analyst** May 2020 - December 2020  
GoalMogul | Toronto, Canada

- Created event tracking graphs, funnels, and models on Amplitude to visualize metadata from ~100 test users
- Used visuals to observe trends in order to better understand user experience, diagnosed flaws of tracking framework, recommended events to track in the next sprint for deeper insights
- Coordinated task backlog with engineers across the stack in order to get the right analytics events tracked
- Managed product analytics dashboard on Asana to create and organize tables which held detailed descriptions of product user tracking events and to organize analytics objectives and goals

**Research Assistant** June 2018 - September 2018  
Stony Brook University, Shah Lab | New York, United States

Understudied for doctoral candidate for 4 months, assisted with live model training and data collection, was solely responsible for novel machine used to measure rat model gait, used software to complete analysis, wrote instructional documentation, presented to committee of lab professor and doctoral students on research findings

### Key Accomplishments:

- Co-authored on "Comprehensive investigation of forelimb kinematics during overground locomotion in non-injured rats"
- Worked with the MotoRater machine to collect data and proactively diagnose problems associated with testing and proposed solutions which were implemented by creating a guideline document for future users
- Tested eleven live rat models on MotoRater to quantify gait cycles and determine baseline performance which allowed for comparison to post-treatment tests
- Analyzed collected data in SIMI Motion Analysis to determine patterns of locomotion and interpret results of various parameters including joint angles, velocities, X-Y coordinates, intra/interlimb coordination, L/R forelimb and hindlimb coordination, and phase cycles

## Organizations

**Vice - President** September 2019 - June 2020  
University of Toronto Veg Club | Toronto, Canada

- Leader of a recognized student group with 14 executive members and 1000+ general members and worked to challenge contemporary conventional beliefs about ethics, health, and the environment
- Moderated meetings, managed club executives and events, organized collaborations with other student groups, secured ~\$3k in funding from various university societies for regular events and the annual gala