# Jonathan Skaza

💌 jonathan.skaza@gmail.com 📢 jskaza 🏶 jskaza.github.io 🛅 jonathanskaza

## **Education**

University of Michigan, M.S. Biostatistics

2017

Advisor: Brisa Sanchez

Bryant University, B.S. Applied Mathematics/Statistics, Applied Economics, summa cum laude 2015

Advisor: Brian Blais

# Experience

#### **Cold Spring Harbor Laboratory**

Cold Spring Harbor, NY

Computational Science Developer

2023-

Supervisor: Ben Cowley

Computational neuroscience and neuroAI research group led by Ben Cowley. Constructing connectome-constrained DNNs to understand visual processing. Mentor a talented high school student interested in computational neuroscience.

**Panalgo** Boston, MA

Associate Director, Product 2022-2023

Lead Analyst 2022

Senior Analyst 2020-2022

Analyst II 2018-2020

Panalgo develops software for Real-World Evidence (RWE) studies. The company maps massive healthcare claims and EHR datasets into a data model and provides a web application to drastically simplify and accelerate patient-level analysis. I have worked with clients to implement various types of healthcare studies, engineers to enhance the product, machine learning experts to implement new algorithms, product leaders to develop roadmaps, and business analysts to understand user behavior.

#### University of Michigan

Ann Arbor, MI

Data Scientist 2017-2018

Conducted research involving longitudinal data analysis, functional data analysis, Bayesian hierarchical modeling, data visualization, and data wrangling. Collaborations with University of Michigan Department of Psychiatry and Drexel University Urban Health Collaborative.

#### University of Michigan

Ann Arbor, MI

Graduate Student Research Assistant

2015-2017

Developed statistical methods and applications in modeling cortisol, a biomarker of stress, as part of a psychoneuroendocrinology study. Member of Biostatistics for Social Impact lab.

**Bryant University** Smithfield, RI

Undergraduate Research Assistant

2014

Implemented econometric analyses concerning the economic impact of children, the education system, and the defense industry in the state of Rhode Island.

North Carolina State University & Duke University

Raleigh, NC

#### **Summer Institute in Biostatistics**

2014

Explored the field of biostatistics through lectures, statistical computing labs, and data analysis project. Sponsored by NHLBI and NCATS.

### **Publications**

Mayer et al. (2019) How does hair cortisol assessment correspond to saliva measures and to lab-based probes of HPA axis regulatory function? Psychoneuroendocrinology

Abelson et al. (2019). Does salivary cortisol reflect key regulatory control aspects HPA axis functioning in healthy humans? Psychoneuroendocrinology

Abelson et al. (2019). Daily diurnal salivary curves: Are they too noisy to be useful? Psychoneuroendocrinology

Wang, J. et al. (2018). The Advantage of Doubling: A Deep Reinforcement Learning Approach to Studying the Double Team in the NBA. MIT Sloan Sports Analytics Conference

Skaza, J. and Blais, B. (2016). Modeling the Infectiousness of Twitter Hashtags. *Physica A* 

Beaudin, L. and Skaza, J. (2015). Measuring the total impact of demographic and behavioural factors on the risk of obesity accounting for the depression status: a structural model approach using new BMI. Applied Economics

Skaza, J. and Blais, B. (2013). The relationship between environmental degradation and economic growth: exploring models and questioning the existence of an Environmental Kuznets Curve. Bryant University Center for Global and Regional Economic Development Working Paper Series

# Certifications

Awards	
SAS Certificate in Data Mining (Bryant University & SAS Institute)	2015
Programming with Google Go Specialization (Coursera)	2022
Introduction to SQL (Coursera)	2023
Practical Deep Learning for Coders (fast.ai)	2023
ChatGPT Prompt Engineering for Developers (DeepLearning.AI)	2023
LangChain for LLM Application Development (DeepLearning.AI)	2023

# Awarus

Sanjay Gupta Family Hackathon Winner 2018 SAS Institute Award (Top Applied Mathematics Undergrad) 2015 Excellence in Economics Award (Top Economics Undergrad)

2015

Undergraduate Research Grant

2013

## **Skills**

Python (NumPy, Pandas, scikit-learn, Keras), R (tidyverse), Go, Julia, Nim, Jupyter, Git, SQL, MongoDB, LaTeX, Notion, Jira

## **Interests**

Computational Cognitive Science, Biologically-Plausible AI, NeuroAI, XAI, Reproducible Research

# **Select Coursework**

Statistical Computing, Machine Learning, Bayesian Inference, GLMs, Longitudinal Analysis, Survival Analysis, Probability, Neuroscience, Cognitive Psychology

## References

Available upon request