Jonathan Skaza

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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. Using connectome-constrained DNNs to understand visual processing.

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

LangChain for LLM Application Development (DeepLearning.AI)   2023

ChatGPT Prompt Engineering for Developers (DeepLearning.AI)   2023

Practical Deep Learning for Coders (fast.ai)   2023

Introduction to SQL (Coursera)   2023

2022 Programming with Google Go Specialization (Coursera)   2022

2015 SAS Certificate in Data Mining (Bryant University & SAS Institute)   2015

Awards

Sanjay Gupta Family Hackathon Winner   2018

2015 SAS Institute Award (Top Applied Math Undergrad)   2015

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, Intelligible Intelligence, Explainable AI, Reproducible Research

Select Coursework

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

References

Available upon request

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