Isaac Ehrlich

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EDUCATION

University of Toronto, Toronto, ON Sept 2017 – Dec 2020
Honors B.S. with Distinction; Double Major in Statistics and Computational Cognitive Science
Relevant Coursework: Computer Science for Statistics, Statistical Methods of Machine Learning, Methods of Data Analysis, Statistical Theory, Multivariable Calculus, Linear Algebra

WORK EXPERIENCE

Department of Statistical Sciences, University of Toronto, Toronto, ON Nov 2020 – Present
Teaching Contributor

- Developed online R tutorials on basic set-up, functions, and libraries for undergraduate students
- Worked to standardize R education across courses and professors in the statistics department

Computational Cognitive Development Lab, University of Toronto, Toronto, ON Sept 2018 – Present
Research Project Lead

- Developed and executed multidimensional scaling methods to interpret high-dimensional experimental data
- Modeled categorization in children using Markov chain Monte Carlo in Python and JavaScript
- Conducted data analysis and data management in R and Python for studies about causal learning
    - Presented findings at the Annual Meeting of the Cognitive Science Society in July 2020
      Abstract: *Exploring Category Structure in Children and Adults*

RTI International, Waltham, MA May 2018 – April 2019
Public Health Analysis Intern

- Performed analyses and data visualization in R to determine the accuracy of new nurse staffing data sets
- Modeled the effect of nurse staffing on hospitalizations of nursing home residents using propensity scores
    - Co-authored evaluation of government-funded initiative aimed at reducing hospitalizations
      Report: *Evaluation of the Initiative to Reduce Avoidable Hospitalizations among Nursing Facility Residents – Payment Reform*

PROJECTS

Multisensory Humor Detection Model

- Developed machine learning model in Python using NLP techniques to accurately identify humor from multisensory inputs, such as cartoons

World Color Survey Analysis

- Used multidimensional scaling methods for clustering analysis of color terms across 110 languages

Surveys and Regressions

- Analyzed and wrote reports on survey data such as mental health in academia and technology perceptions

AWARDS

University of Toronto Excellence Award (UTEA) May 2019

- Research grant awarded to students based on research proposal and academic achievement

T-Holder's Academic Excellence Award, All-Ontario Student-Athlete Apr 2018, Apr 2020

- Award given to varsity athletes who demonstrate academic excellence

SKILLS

Technical: Python, R, SQL, Julia, JavaScript, ArcGIS, TeX, Microsoft Office
Leadership Experience: Peer Mentor for Research in Psychology Dept., UofT Varsity Badminton Team Captain
Foreign Languages: Russian (Native Proficiency), French (Elementary Proficiency)
Interests: Hiking, Guitar, Badminton