Sydney Louit

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Weston, CT, 06883

LinkedIn
Personal email

Education

University of Connecticut August 2022 – Present
Ph.D., Statistics (In progress) *Storrs, CT*
- Passed PhD Qualifying Exam in January 2022
- Coursework includes Inference and Probability, research areas include network analysis and spatial statistics.
- Vice-President of Graduate Student Committee in Statistics (since May 2023)

University of Connecticut August 2020 – December 2021
M.S., Biostatistics *Storrs, CT*
- Coursework included Linear Models, Mathematical Statistics, Biostatistics, Data Management in SAS and R, Design of Experiments, Survival Analysis, Epidemiology, Statistical Consulting

Cornell University August 2017 – May 2020
B.S., Biometry & Statistics *Ithaca, NY*
- Graduated one year early
- Minors: Applied Economics, Astronomy
- VP and Historian of Cornell Astronomical Society

Publications

- **Sydney Louit**, Mukul Ram, Kiel Williams, Alex Alduncin, Patrick McCaul, Scott Tranter (2022). "Psephological Correlated Simulation Techniques With Decision Desk HQ: For the 2022 Midterms and Beyond" *Harvard Data Science Review* 4 (4). https://doi.org/10.1162/99608f92.e5a9a4b0

Teaching Experience

Mathematical Statistics I (STAT 3375) Fall 2023
Primary Instructor and Teaching Assistant
- Taught an intermediate undergraduate course on mathematical statistics

Elementary Concepts of Statistics (STAT 1100) Fall 2023 and Spring 2024
Primary Instructor and Teaching Assistant
- Taught a large lecture (200+ students) on introductory statistics

Work Experience

Data Science Leadership Development Program Intern Summer 2023
Travelers *Hartford, CT*
- Under guidance from manager, created machine learning model and experimented with deep learning
- Took advanced courses to improve proficiency in Python, SQL, Excel, and Git

Data Scientist June 2021 – February 2023
Decision Desk HQ *Alexandria, VA*
- Assisted in creating live models
- Made race calls on election nights
- Developed election forecasting methodologies
- With colleagues, wrote and published paper on correlated simulations

RMCL Lab Intern Summer 2017 and 2018

PerkinElmer *Shelton, CT*

- Validated data of the certified UV spectrometer
- Analyzed collected data
- Logged and shipped completed UV standards

Awards & Honors

First Prize - Poster Competition

NESS NextGen Data Science Day *November 2021*

"Predicting Future Light Pollution Using VIIRS Satellite Data and OECD GDP Projections to 2060"

Speed Poster Award Winner

UConn Statistics in Pharmaceuticals Conference *August 2021*

Projects

Light Pollution Economic Analysis October 2021 – June 2022

- Used 90GB of satellite data to analyze economic growth in countries from 2013-2021. Currently working on an adjustment for oil-dependent economies, which appear much brighter than their economy would suggest.

FIFA World Cup Model July 2021 – December 2022

- Created a Bayesian Poisson GLM to estimate team quality, then developed an efficient simulator for the structure of the World Cup qualifiers.

2020 Election Live Model November 2020

- Wrote a Python program to pull live election results from online, paste in spreadsheet, and used the spreadsheet to calculate live probabilities for each state. Projected state and national outcomes in real-time

Specialized Skills

Spoken Languages: English (Native), French, Thai, Mandarin Chinese (mild conversational)
Programming (in order of proficiency): Python, R, SQL, SAS, C++
Software: Excel, LaTeX, Minitab
Machine Learning: Gradient Boosting, Random Forest, Ensembling
Deep Learning: Neural Networks, CNNs