Nicole Sorensen

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EDUCATION

Carnegie Mellon University - 3.82 GPA, Dean's List
Bachelor of Science in Statistics and Machine Learning, Expected May 2026
Relevant Coursework: Methods in Statistics and Data Science, Statistical Graphics and Visualization, Fundamentals of Programming and Computer Science, Multivariate Analysis, Matrix Algebra, Principles of Imperative Computation

RESEARCH EXPERIENCE

Diplomatic Agreements Project, *01/2023 - Present*
- Assisted Professor John Chin with data scraping using Python.
- Managed data cleaning, collection, and organization in Excel for research on US diplomatic agreements.

Bridges to Healthcare Technology Program, *06/2024 - 08/2024*
Carnegie Mellon University, Sponsored by Optum
- Applied statistical learning techniques to healthcare research projects.
- Presented findings to Carnegie Mellon faculty and professionals from Optum and UnitedHealth Group.

PROJECTS

The Socioeconomic Roots of Racial Disparities in Hospitalizations, *06/2024 - 08/2024*
- Analyzed the impact of socioeconomic factors on preventable hospital stays across different racial groups.
- Collaborated with three peers to apply statistical learning and machine learning techniques, including generalized additive models and random forests.

Do Parents and Diet Make a Difference in Young Adult Health? Data Visualization and Analysis of National Longitudinal Data, *11/2023 - 12/2023*
- Visualized and analyzed four waves of data (1995-2008) from The National Longitudinal Study of Adolescent to Adult Health using R.
- Investigated associations between diet, relationships, and variations in mental and physical health over time in collaboration with classmates.

Alpacalypse: Python-Coded 2D Survival Video Game, *11/2023 - 12/2023*
- Developed a side-scrolling survival game using Python and object-oriented programming.
- Implemented features such as random cave generation, enemy and power-up spawning, A* pathfinding for enemy movement, and a hand-drawn game UI.

PROFESSIONAL EXPERIENCE

Reading Tutor, *05/2023 - 08/2023*
Lindamood-Bell Learning Processes – Pasadena, CA
- Delivered one-on-one reading instruction to over 50 adolescents with diverse learning needs.
- Utilized personalized teaching methods and positive reinforcement to enhance student engagement and progress.

TECHNICAL SKILLS

- Programming: Python, R, C, SQL
- Data manipulation (Pandas, NumPy, dplyr)
- Statistical analysis
- Machine Learning (scikit-learn, TensorFlow, Pytorch)
- Data Visualization (Matplotlib, seaborn)

CERTIFICATIONS

- "Machine Learning with Python" (IBM)
- "SQL Essential Training" (LinkedIn Learning)
- "R for Data Science: Analysis and Visualization" (LinkedIn Learning)
- "Machine Learning with Python: Foundations" (LinkedIn Learning)