

Carson Slater

<https://carsonslater.github.io/portfolio2022/>
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SUMMARY	Motivated undergraduate student seeking to gain professional work experience with quantitative and qualitative analytical methods. Strongly interested in studying machine learning, Bayesian methods or causal inference. Seeking to enter a Statistics PhD program in the fall of 2023. Self-disciplined former NCAA athlete. Quick learner who seeks to contribute to any research institution for whom he works.	
EDUCATION	B.S. Applied Mathematics with Statistics B.A. Economics <i>Wheaton College, Wheaton, IL</i> <i>Edman Presidential Scholarship</i>	May 2023 3.41/4.00 GPA
RELEVANT COURSEWORK	Mentored Research Seminar, Numerical Analysis, Linear Algebra for Data Analysis, Experiences in Data Analysis, Mathematical Statistics, Machine Learning, Probability Theory, Real Analysis, Intensive Introduction to Computer Science (<i>Harvard</i>), Economics of Labor and Poverty.	
TECHNOLOGY SKILLS	<i>Software Languages:</i> R/RStudio, SAS, Python, C, SQL, L ^A T _E X, JavaScript, CSS, HTML. <i>Languages:</i> Intermediate Koine Greek and Spanish (<i>Classroom Study</i>).	
EXPERIENCE	<div><div><i>Applied Machine Learning Teaching Assistant</i></div><div>December 2022-Present</div><div>Wheaton College Department of Mathematics and Computer Science</div><ul style="list-style-type: none">Hosted help sessions for students to come with questions for their Python code or ML concepts.Graded Python Jupyter notebooks as homework assignments from students.</div> <div><div><i>Probability Theory Teaching Assistant</i></div><div>August 2022-December 2022</div><div>Wheaton College Department of Mathematics and Computer Science</div><ul style="list-style-type: none">Hosted help sessions for students to come with questions on the homework or class content.Was available for email correspondence with homework questions outside of help session hours.</div> <div><div><i>Participant</i></div><div>June 2022-July 2022</div><div>Duke/North Carolina State Summer Institute for Biostatistics</div><ul style="list-style-type: none">Participated in several classroom discussions to engage standard biostatistical methods and areas of study at Duke Clinical Research Institute and North Carolina State University.Culminated in a Hackathon investigating and modeling myocardial infarction and associated complications.</div>	

Data Analyst June 2020-July 2020
Wheaton College Center for Vocation and Career

- Tidied and analyzed data from Wheaton College's Class of 2020 as a project for Wheaton College's Center for Vocation and Career.
- Utilized Microsoft Excel and survey data to determine the post-graduation outcomes by state, major, and gender.

PROJECTS

Forecasting FMCG Demand Using Generalized Additive Models November 2022

- Built time-series forecasting models to predict quantity-demanded for fast-moving consumer goods in Indonesia.
- Presented poster at University of Illinois – Chicago's 2022 Undergraduate Mathematics Symposium and Wheaton College's 2022 Homecoming STEM Poster Session.

Understanding and Modeling Predictors to Earned Run Average in Modern Major League Baseball May 2022

- Conducted variable selection using predictors from the Lahman baseball database to model Earned Run Average using regression analysis. Used the same predictors to build a single-layer neural network and a radial support vector regression model in R/RStudio.

Does the Universal DH Have a Significant Impact on Offensive Productivity? May 2022

- Utilized a difference-in-differences approach to compare the 2019-2021 MLB season where 2020 uniquely featured a universal designated hitter (DH). Found through one-way ANOVA the universal DH had an insignificant impact on offensive productivity.

Hill Cipher Cryptography with Matrices May 2021

- Utilized a Hill Cipher to encode and decode messages. Wrote a brute force Python Program to decode $2 \times n$ matrices.

EXTRA-CURRICULAR VOLUNTEER

ESL Instructor August 2022
Josiah Venture Czech Republic

- Taught conversational English classes, functional fitness and computer programming concepts in Scratch to Czech teens at a summer English camp near a small city on the border of Poland and the Czech Republic, called Český Těšín.

Varsity Baseball Player August 2019 - May 2022
Wheaton College Athletics, NCAA

- Practiced baseball six days a week for multiple hours and played over forty-games during the spring semester.

Sophomore Class Council Administrator August 2020 - May 2021
Wheaton College Student Government

- Wrote agendas for meetings and managed large-scale projects as an administrator. Managed the class budget and delegated responsibilities for class assemblies. Created a survey to gauge on-campus mental health during the fall 2020

semester.