# Carson Slater

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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. Mathematics with Statistics**                                                                                        May 2023
**B.A. Economics**                                                                                              3.41/4.00 GPA
*Wheaton College*, Wheaton, IL
*Edman Presidential Scholarship*

Related 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 (*Harvard*), Economics of Labor and Poverty.

## SKILLS

*Software Languages*: R/RStudio, SAS, Python, C, SQL, JavaScript, CSS, HTML. *Languages*: Intermediate Koine Greek and Spanish (Classroom Study).

## EXPERIENCE

**Probability Theory Teaching Assistant,** *Wheaton College Department of Mathematics and Computer Science*          August 2022 – Present
- Hosted help sessions for students to come with questions on the homework or class content and also graded homework.

**Participant,** *Duke/North Carolina State Summer Institute for Biostatistics*                          June 2022 – July 2022
- 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.

**Data Analyst,** *Wheaton College MySkills 2020 Project*                                          June 2020 – August 2020
- 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*                                    August 2022 - 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 $2 x n$ matrices.

## VOLUNTEER & COMMUNITY SERVICE

**ESL Instructor,** *Josiah Venture Czech Republic*                                                            August 2022
- 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.

**Strongholds Group Leader,** *Wheaton College Discipleship Ministries*                              August 2021 – May 2022
- Partnered with a co-leader to develop curriculum for a small group of 14 men who met once a week for teaching. Facilitated a safe space for fellowship and open discussion.

**Council Administrator,** *Wheaton College Sophomore Class Council - Student Government*            August 2020 – May 2021
- 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.