**Jonah Zembower** **Portfolio Website:** https://jonahzembower.com

**Email:** jr.zembower@gmail.com, **Phone:** 814-977-9648

**Undergraduate Education**

Seton Hill University, Greensburg, PA

***Bachelor of Science in Data Science – Computational Analysis***, May 2025 (GPA 3.70)

***Bachelor of Science in Exercise Science – Health & Fitness Track***, May 2025 (GPA 3.94)

**Overall GPA:** 3.82/4.0, Magna Cum Laude

**Graduate Education**

Carnegie Mellon University, Pittsburgh, PA

***Master of Science in Health Care Analytics and Information Technology***, May 2027

**Skills**

**Technology:** Microsoft Office and Power Apps, Python, R Studio, Visual Studio, DBMS Software, Jupyter Notebook, Tableau, Looker Studio, Orange, and HTML/CSS/JavaScript, Java

**Certifications:** ACSM EPC, First Aid/CPR/AED

**Languages:** Spanish (Intermediate), Italian (Elementary)

**Work Experience**

Walmart ACC 7377, Lebanon, PA

* June 2, 2025 – August 15, 2025
* Title: Operations Area Manager Intern
* Collaborated with the engineering and operations teams at the consolidation center, ACC 7377, to optimize the label placement and printing process in the ACC 7377 building. My project was able to introduce $6,000 worth of savings for the implementation week compared to the same week in 2024, with the potential of much more in further implementation across locations and shifts.

Peak Performance Biomechanics, Slippery Rock, PA

* December 16, 2024 – May 9, 2025
* Title: Data Specialist Intern
* Conducted a comprehensive analysis of biomechanical and ergonomic data using Noraxon software, with subsequent data export to Python or R for advanced processing. Developed clear, reportable visualizations tailored to each client, leveraging insights from IMU and EMG data collection to highlight performance metrics. Designed data-driven reports that effectively showcase client needs and improvements.

**Relevant Projects**

**EY 2025 Data Science Challenge**

* Collaborated with colleague, Ben Nicholson, to evaluate predictive factors influencing New York City's urban heat island effect, utilizing satellite data from Sentinel-1 and Sentinel-2, Landsat-8, and planimetric data to develop an analytical model, achieving a ranking of 86th out of over 2,000 competing teams. Our machine learning model was 95% accurate in prediction of different locations for a given time period and location.

**Heart Rate and Positional Differences for DII Men’s Soccer Athletes:**

* Collaborated with Dr. Brian Larouere and Dr. Jared Burns to analyze positional and baseline measurement differences in heart rate among Division II men’s soccer athletes. Presented findings at the Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC ACSM) conference in Fall 2024.

**Ergonomic Catheterization Laboratory Study:**

* Collaborated with Dr. Christopher Hughes, Greta Campbell, Dr. Ajar Kochar, Dr. Raghav Gattani, and Dr. Fouad Chouairi to assess data collected through Noraxon IMUs and EMGs for operators wearing the lead vest versus using the rampart device. We presented this research study in the SCAI 2025 Conference at Washington, DC.

**Time Series Analysis:**

* Applied ARIMA modeling in Python to forecast trends in datasets like sunspots and electricity consumption. Conducted data preprocessing, parameter tuning, and model evaluation to optimize predictions.

**Customer Segmentation:**

* Performed clustering analysis in Python to categorize customer types based on dataset insights. Applied data-driven techniques to uncover patterns and enhance segmentation accuracy.

**Life Expectancy Analysis:**

* Analyzed WHO data in Python to predict life expectancy across 183 countries using various contributing variables in multiple regression.

**Multiple Regression Analysis:**

* Collaborated on a group project using R to analyze datasets on sled load and time, bacterial lifespan, genetic markers in Caiman, and gut bacteria. Performed multiple regression analysis on various potential predictors.