**Jonah Zembower** **Portfolio Website:** https://jonahzembower.netlify.app/

**Email:** jr.zembower@gmail.com, **Phone:** 814-977-9648, **Address:** 689 Rowser Rd, New Paris, PA 15554

**Objective**

Seeking a position where I can leverage my meticulous attention to detail, robust analytical capabilities, and strong problem-solving skills. I aim to collaborate effectively with teams to devise innovative solutions to complex challenges.

**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

**Honor’s:**

***Dean’s List,*** 7 semesters, ***Recipient,*** Data Science Achievement Award x2

**Graduate Education**

Carnegie Mellon University, Pittsburgh, PA

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

**Skills**

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

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

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

**Work Experience**

Peak Performance Biomechanics, Slippery Rock, PA

* December 16, 2024 – May 9, 2025
* Title: Data Specialist Intern
* Conduct a comprehensive analysis of biomechanical and ergonomic data using Noraxon software, with subsequent data export to Python or R for advanced processing. Develop clear, reportable visualizations tailored to each client, leveraging insights from IMU and EMG data collection to highlight performance metrics. Design 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.

**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.

**ACWR for Injury Risk in DII Women’s Lacrosse Athletes:**

* Collaborated with Dr. Christopher Hughes and DPT students at Seton Hill University to analyze existing literature and athlete data to explore the potential correlation between Acute: Chronic Workload Ratio (ACWR) and injury incidence in Division II women’s lacrosse athletes.

**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. This research study submitted an abstract for an SCAI Presentation this year.

**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.

**Database Implementation:**

* Collaborated on a group project to design a database solution for a fictional company. Developed a comprehensive plan outlining technology, implementation strategy, and cost analysis.

**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.

**Portfolio Website:**

* Designed and developed a website using HTML, CSS, and JavaScript to showcase projects, experience, and activities.

**University / Community Involvement**

***Leader,*** **Fellowship of Christian Athletes:**

* Fostered spiritual growth and community connection through regular engagement and shared learning. Meetings every Tuesday with presentations from leaders.

***Member,* Exercise Science Club:**

* Involved in different programming for exercise science on and off-campus.

***Member,* Service Advisory Board:**

* Develop and lead service projects on and off-campus.

***Member,* NCAA DII Men’s Soccer Team:**

* Learning teamwork, leadership, and time management.

***Member,* Campus Traditions Committee:**

* Involved in leading, planning, and maintaining campus traditions.

**Reference List**

Dr. Joshua Sasmor, Associate Professor and Program Coordinator of Mathematics, sasmor@setonhill.edu

Dr. Jared Burns, Dean of the School of Business and Technology and Associate Professor, jburns@setonhill.edu

Dr. Brian Larouere, Associate Professor and Program Coordinator of Exercise Science, blarouere@setonhill.edu

Dr. Christopher Hughes, Owner of Peak Performance Biomechanics, chughes42@zoominternet.net