

# Are Varsity Swimmers Taller than Volleyball Players?

## Introduction

The goal of this project is to determine whether varsity (college-level) swimmers are, on average, taller than their volleyball counterparts. By collecting and analyzing athlete height data from several colleges and universities across the country, we aim to provide a data-driven answer to this question.

## Techniques Used

We employed web scraping techniques using Python, specifically the `requests` and `BeautifulSoup` libraries. The provided code template was edited to include additional team links for each category: men's and women's volleyball, and men's and women's swimming. During this process, we found that some current roster pages were missing height statistics. To resolve this, we modified the URLs to access previous years' rosters, which successfully yielded the needed data. To improve accuracy and flexibility in data collection, we replaced the restrictive `find_all` method with the more effective `select` method. This allowed broader matching of class names containing "height." Similarly, we used a list called `name_tags` to reliably gather player names, ensuring consistent data capture across all team pages. We also added a function call to `datatoVSC()` to loop through all the URLs and convert the extracted data into structured Pandas DataFrames, which were then exported into CSV files for each sport-gender category. These DataFrames enabled us to compute the average height using the `.mean()` method.

## Methodology

- Scraped athlete height data from each roster URL.
- Adjusted URLs where needed to access older rosters when data was missing.
- Extracted data using `select` to locate `<td>` tags by class content.
- Compiled data into lists categorized by sport and gender.
- Created individual DataFrames from the lists.
- Calculated average heights using the `.mean()` method.
- Exported results to CSV files for documentation and further analysis.

## Findings

- **Men's Swimming Average Height:** 71.16 in
- **Women's Swimming Average Height:** 65.64 in
- **Men's Volleyball Average Height:** 71.21 in
- **Women's Volleyball Average Height:** 67.61 in

### **Discussion**

The results indicate that volleyball players are, on average, slightly taller than swimmers—particularly among women. For men, the difference is minimal (71.21 in vs. 71.16 in), suggesting nearly equal average heights. However, women's volleyball players are about 2 inches taller than their swimming counterparts. Given the variety of schools and the adjustment to access complete rosters, the sample appears broad and reasonably representative of varsity-level athletes across both sports.

### **Conclusion**

Based on the data collected and analyzed, varsity volleyball players tend to be taller than swimmers, with the difference more pronounced in women's athletics. The scraping methodology, combined with strategic data handling and analysis, allowed us to draw reliable conclusions supported by clear numerical evidence.

# Appendix

