120 Years of Olympic History

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Final Project Plan

560.348 - Probability & Statistics for Engineers

I.   Motivations

 For many people the idea of becoming an olympic athlete is a monumental feat. We hope to demystify this process by statistically determining the best way for potential athletes or even the average person to start training.

II.   Hypothesis

If we analyze the past 120 years olympic history data, we will be able to determine a relationship between a person's build and the sports they will perform best with, as well as a relationship between performance in a certain sport and an athlete's origin.

III.   Research Approach

Categories -> conduct statistical analysis on each category (std, mean, distribution) -> Match to user input -> output results

IV.   Methods From Class

Normal Distributions for ages and weights, Z- score, confidence interval, averages, standard deviations

V.   Data Sources

Kaggle

VI.   Timeline

May 7th - Submit Poster and Code

May 9th - Poster Presentations

VII.   Task Division

Arion: Matlab (Machine Learning Applications), Poster

Alex: Matlab (Machine Learning Applications), Poster

Nikhil: Matlab (User Interface), GitHub setup

Justin: Matlab (Statistics Application), Poster

Anna: Matlab (Organization & Commenting), Poster