

# SAT Analysis

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# Introduction



**Question:** Which college majors are the most lucrative? 2017-2019 student SAT scores will be analyzed to determine which sections of the test are most relevant to these majors, and which states are scoring favorably in these areas over time.

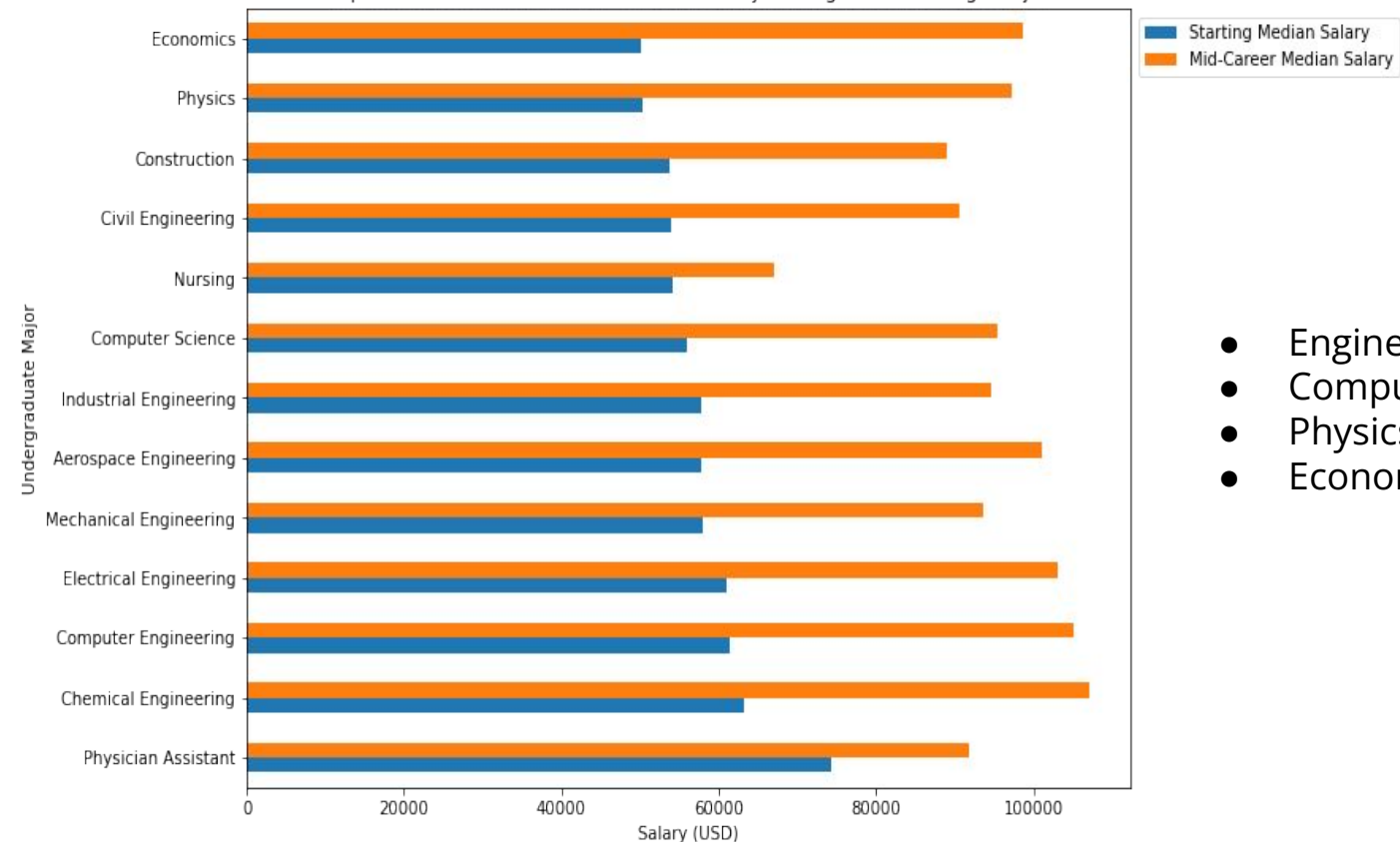
**Goal:** Provide program funding and recruitment recommendations to a university executive board.

# Data Gathering/Cleaning

- Wall Street Journal Dataset: “Degrees that Pay you Back”
- 2019 Average SAT Scores by Intended College Major
- 2017-2019 Average SAT Scores by State

# Which College Majors are the Most Lucrative?

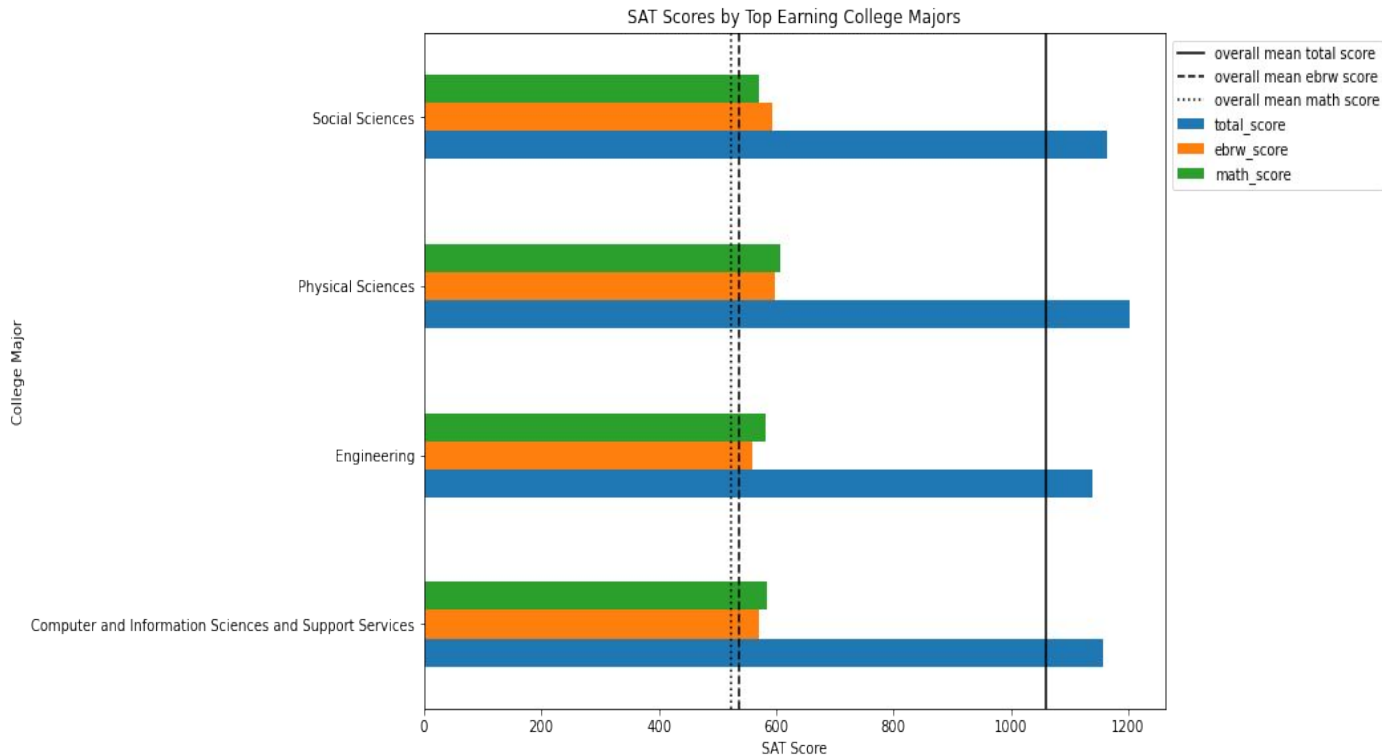
Top 25% Salaries from Start to Mid-Career by Undergraduate College Major



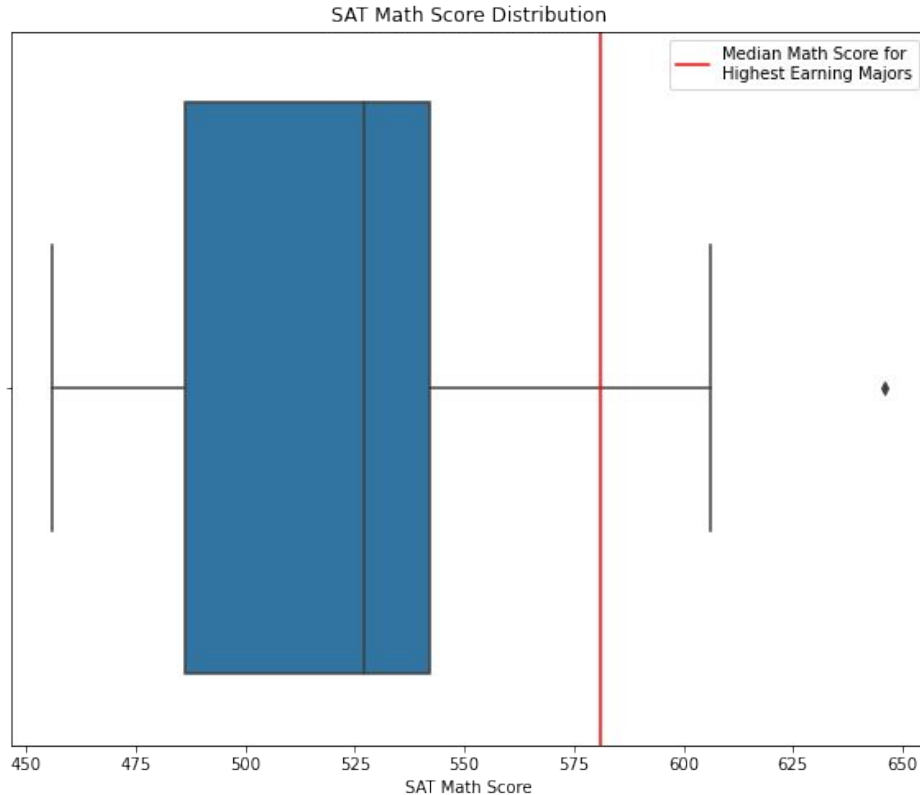
- Engineering
- Computer Science
- Physics
- Economics

# Are SAT Scores Higher for Top Earning Majors?

- **Overall mean total score:**  
1058.50
- **Highest earners mean total score:** 1168.50
- **Overall mean EBRW score:**  
535.5
- **Highest earners mean EBRW score:**  
580.25
- **Overall mean math score:**  
523
- **Highest earners mean math score:**  
585.50



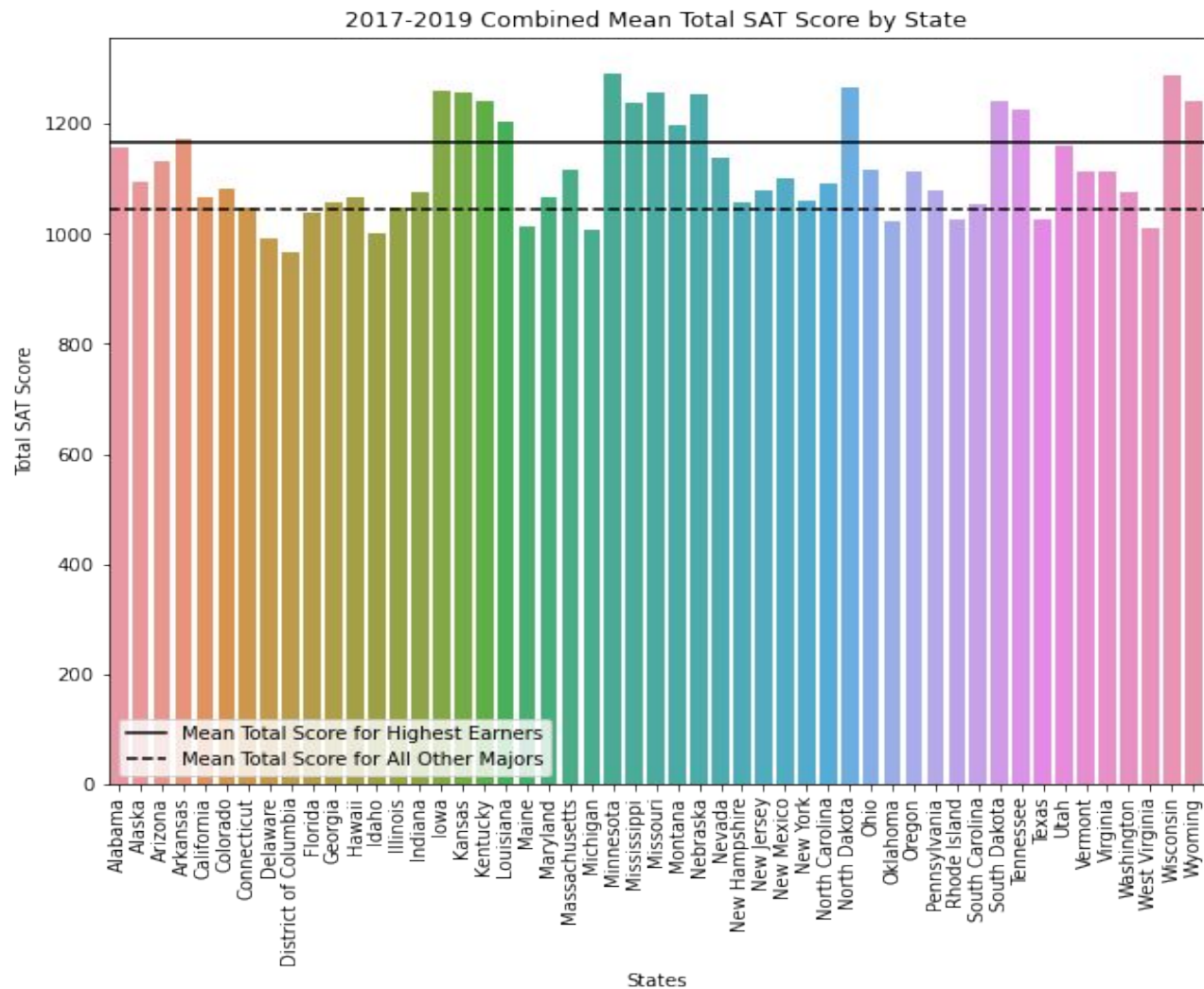
# What Section(s) of the Tests are Most Relevant to Top Earning Majors?



On average, top earning majors scored:

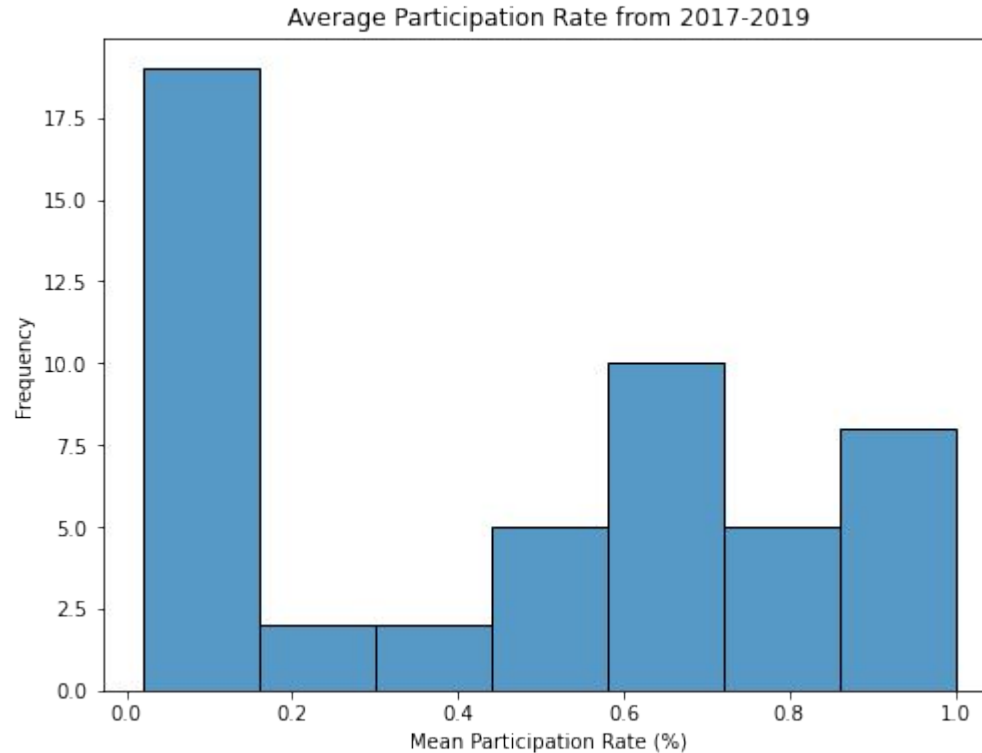
- **7.47%** higher on total Score
- **6.25%** higher on EBRW score
- **8.73%** higher on math score

What states are scoring favorably on each section of the SAT?



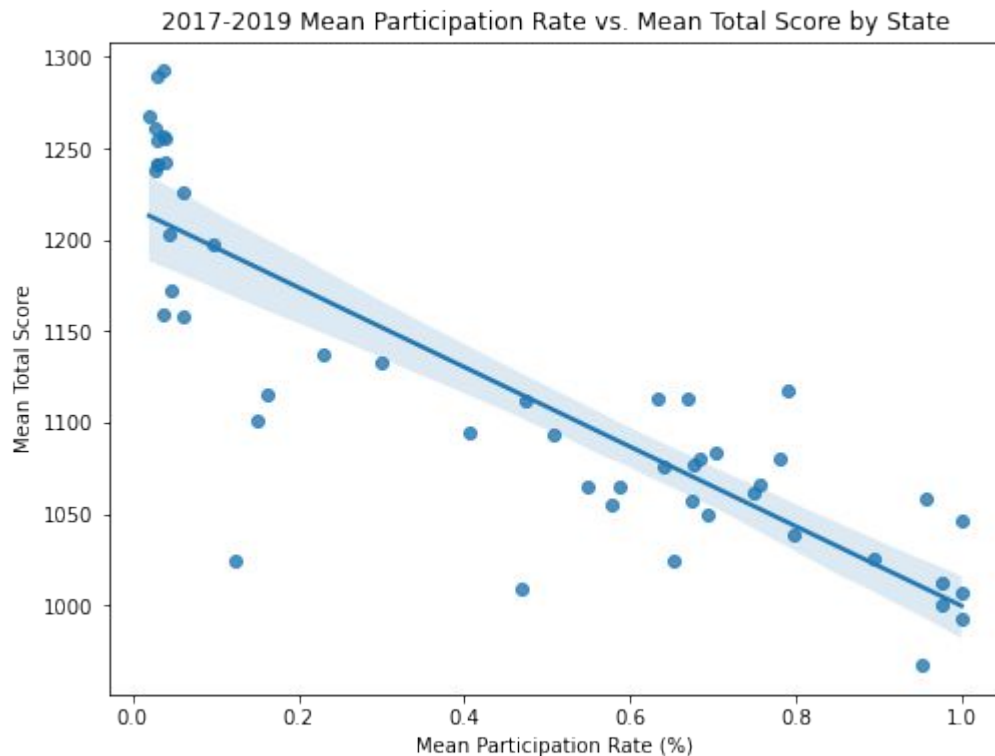
# The issue with this data?

- State Participation Rate





# Relationship Between Participation Rate and SAT Score:



- Is there representation among high scoring students in high participation rate states?

# Conclusions and Recommendations:

- The highest earning majors are Engineering, Computer Science, Physics and Economics
- These majors tend to score higher on all portions of the SAT
- The SAT math section has the largest score difference
- The states that had favorable Total, EBRW and Math SAT scores were consistent across 2017-2019
- Participation rates are negatively correlated with test scores

Thank you!