

US Colleges Dashboard

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Our Purpose

To make a dashboard for early college research.

Users will be able to explore:

- future salaries based on
 - degree,
 - type of school, and
 - region
- Schools in the US by:
 - Highest level of education offered
 - Locale
 - Hospital Availability
 - Medical Degree Offered
 - HBCU and Tribal classifications

Our Data

Kaggle

Wall Street Journal:

- We used three datasets from the Wall Street Journal.
 - One had a list of 250 schools with the classified type given (state, engineering, party, liberal arts, and ivy league). A breakdown of the median salary from each school type was then given including starting and career salary.
 - The other set contained a list of over 300 schools with the region given (California, Western, Northeastern, Midwest, and Southern). The median salary from each region was also given.
 - The last Set contained a list of 50 undergraduate majors that are most commonly offered in the US.

NCES: IPEDS

National Center for Education Statistics: Integrated Postsecondary Education Data System

- Government agency that makes basic data on United States Colleges publicly available in CSV format (about 6,000 colleges listed)
- Data Includes:
 - College name
 - Colleges address and coordinates
 - Key college web addresses for applicants
 - College Classifications:
 - Highest level of education offered
 - Locale
 - Hospital Availability
 - Medical Degree Offered
 - HBCU and Tribal classifications
 - Size and Setting (Carnegie Classification)

Research Questions

- What majors have the greatest starting salaries? The greatest salaries over time?
 - What regions receive the greatest average salaries? Mid career salaries?
 - What colleges are available in these regions?
- What colleges are available at various locales?
- What colleges offer medical degrees?
- What colleges are available with certain student populations?

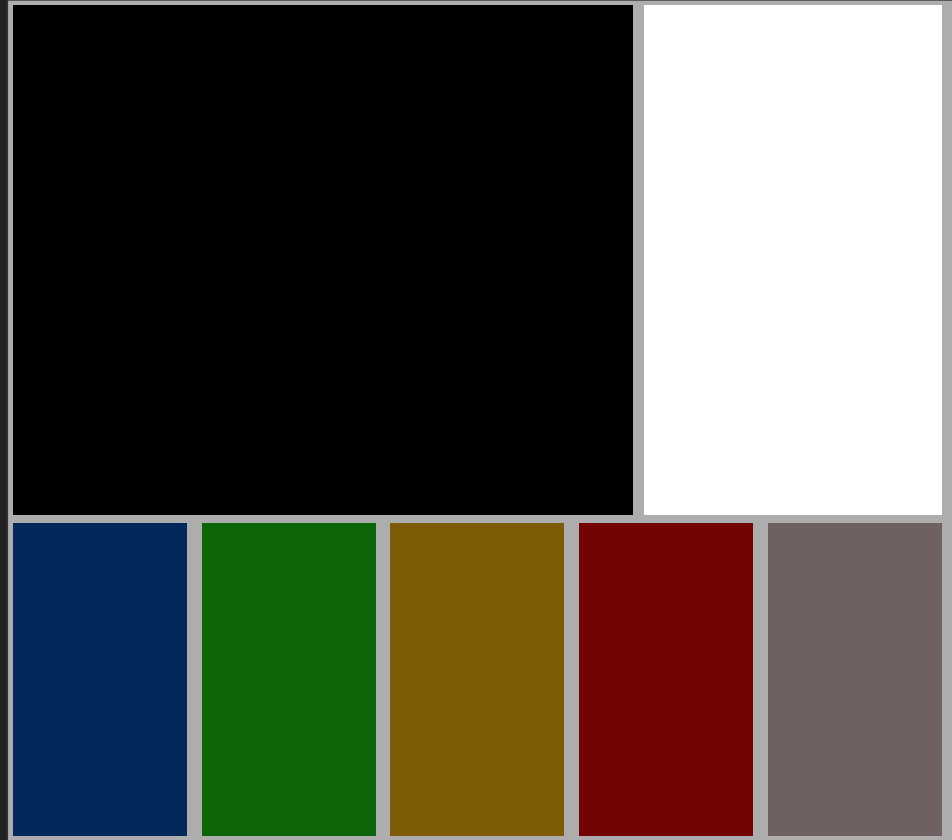
Our Design

COLOR PALETTE

Black and white with University Colors

- Minimalistic design: no fuss and and classic
- Pops of colors commonly associated with universities
- Light text on dark backgrounds for easier engagement

(<https://wpcommerz.com/what-is-dark-mode/>)



Dashboards

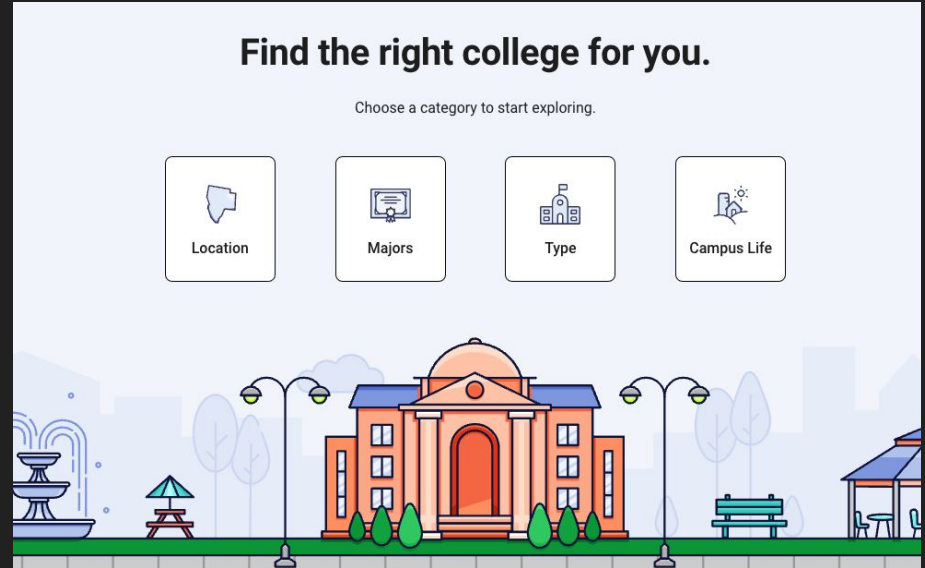
- One interactive leaflet map that responds to filters based on:
 - highest level of degree offered,
 - locale,
 - hospital availability,
 - if medical degrees are offered, and
 - HBCU or Tribal school classification
- 3 plotly charts that respond to filters based from the region the school is located and the type of school.
 - A sunburst chart that displays the school names within each region
 - A pie chart displaying the percentage of each school type within the selected region.
 - A horizontal bar chart displaying the career median salary of a selected number of schools within a region or type.
- One Radial Stacked Bar Chart (d3) on degree vs salary comparison

Observations

- 85% of our schools were either state or liberal arts colleges.
- Ivy league universities on average earned the highest career median salary of all the school types.
 - State college graduates earned the lowest career median salary of all the school types.
- State colleges dominate the regions with the exception of the Northeastern region where state colleges comprise just 10 percent of the total colleges given.

Future Work

- Add images of schools to website
- Unify filter tools to explore all data all at once (similar to CollegeBoard, on the right)
- Add Degrees Offered as a search term for map



<https://bigfuture.collegeboard.org/college-search?navId=bf-cs>

Limitations

- Disjointed data: Wall Street Journal (Kaggle) and IPEDS only overlap for <100 schools
- There is not a frequently updated API to link to our dashboard.

Thank you!