Analysis of Adult Income in the U.S.

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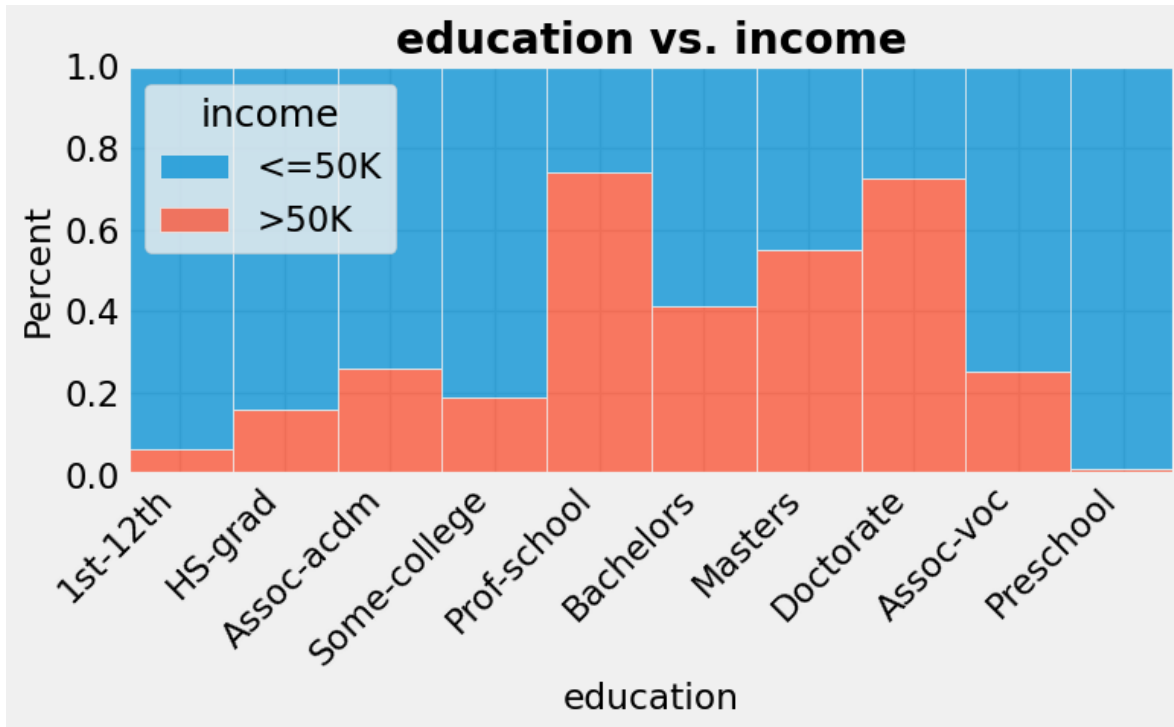
The problem

- Department of Health and Human Services
- How to outreach to lower-income households that may qualify for supportive services
- Creating the model based off the U.S. Census from 1994
  - Age, education, type of employment, marital status, race, gender
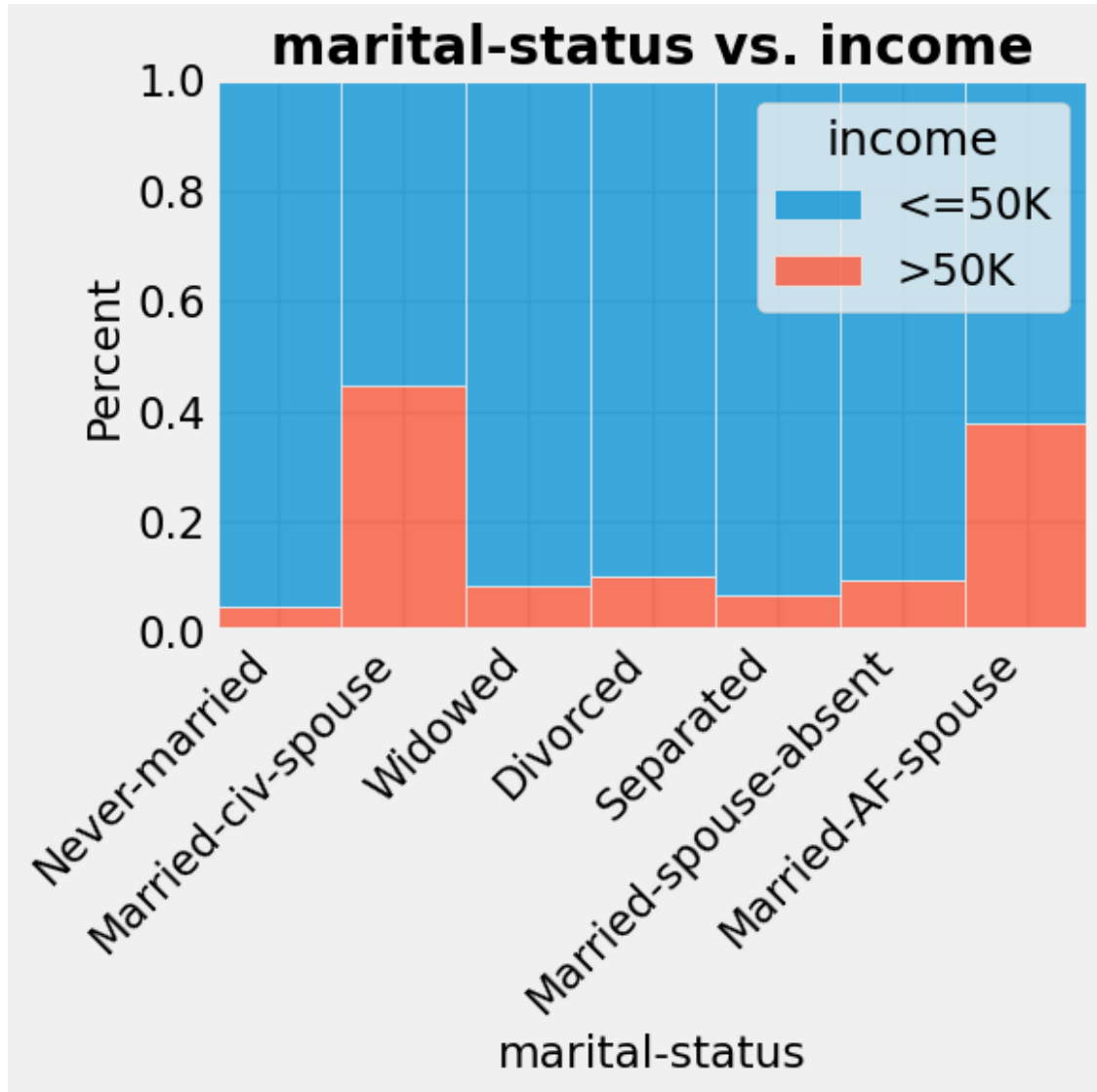
Education vs. Income

- High correlation between increased years of education and higher income
- Higher-income majority seen post-graduate and above

Marital Status vs. Income

- High correlation between married households and higher income
- Still majority lower-income for these households

Results

- Random Forest Classifier
  - Low rate of false positives/people who are low-income but are classified as high income
  - Lowest rate of false negatives/people who are high-income but classified as low income

- Recommendations:
  - Further screening for income to combat the false negative rate
  - Emphasis on supportive services for pre-college graduates and individuals who are not currently married