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# Postsecondary Education Descriptive Statistics

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Group 5

Martin E. Guyer, Feifei Lei, Bin Zhuo, Kalbi Zongo

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# Over View

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- Motivation
  - Education is vital not only for individuals, but also for the government and society.
- Data
  - 2010-2012 American Community Survey for US population records.

[http://www2.census.gov/acs2012\\_3yr/pums/csv\\_pus.zip](http://www2.census.gov/acs2012_3yr/pums/csv_pus.zip)

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# Questions of Interests

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- What percentage of people have attained some sort of postsecondary education in each of the fifty states?
  - For each race, what is the proportion of people who attained some sort of postsecondary educational degree in each state?
  - Which of these educational degrees has the highest average salary for each state?
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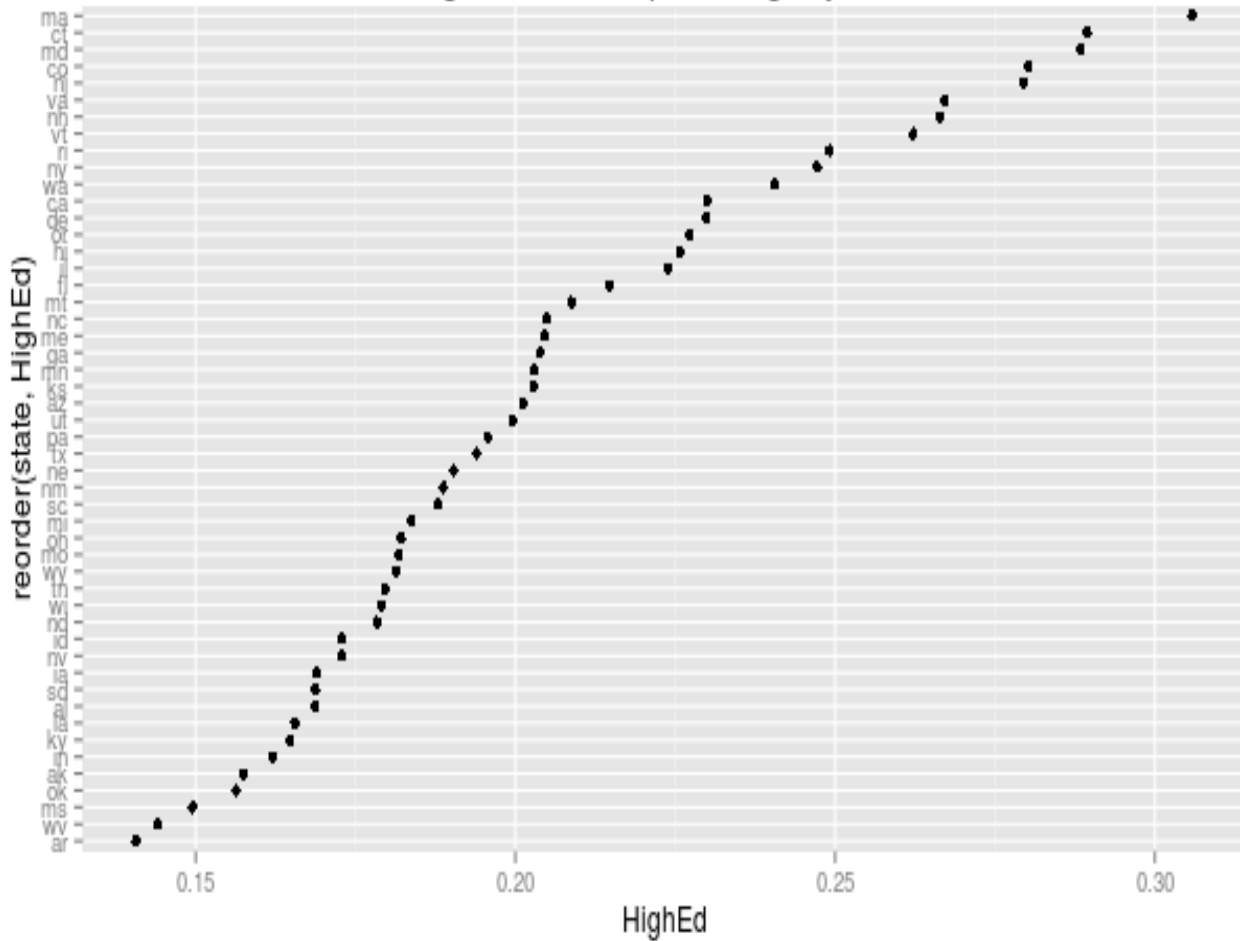
# Findings

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- Question 1

- The Northeastern US contains the highest proportions of people receiving the post secondary degrees.
  - Massachusetts has the biggest proportion of highly educated people across the US.
  - The proportion of highly educated people may be related with the range of educational facilities.
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Higher education percentage by state



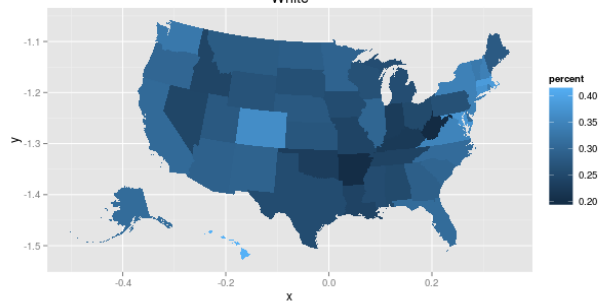
# Findings

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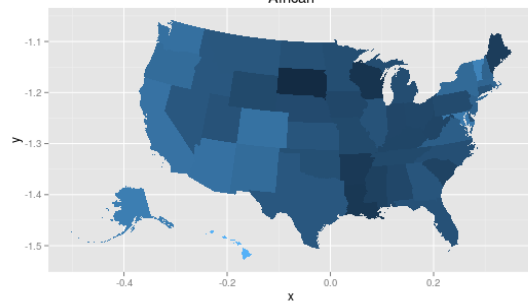
- Question 2

- The highest percentage of population with Associate's degree or above is Asian.
  - White and Hawaiian have the second and third highest percentage respectively.
  - Alaska has the lowest percentage of higher education attainment.
  - Geographic location may have effects on the level of education across different races.
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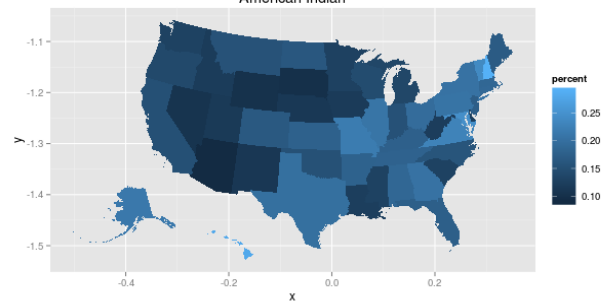
White



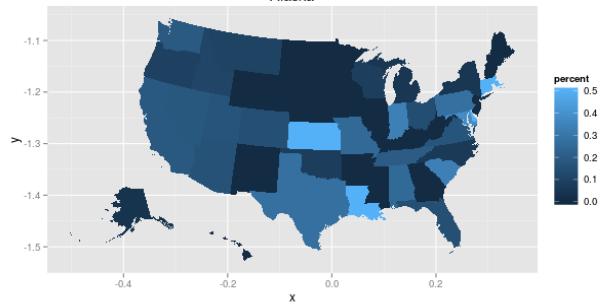
African



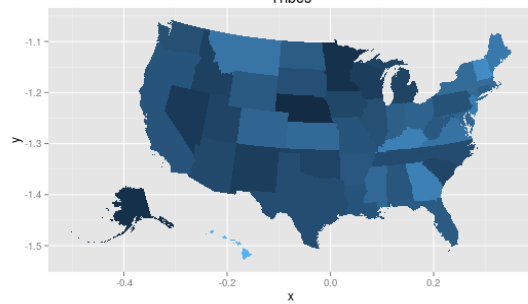
American Indian



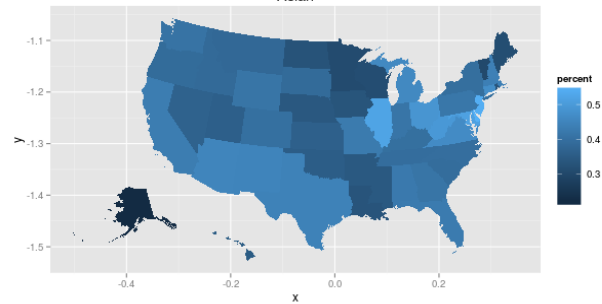
Alaska



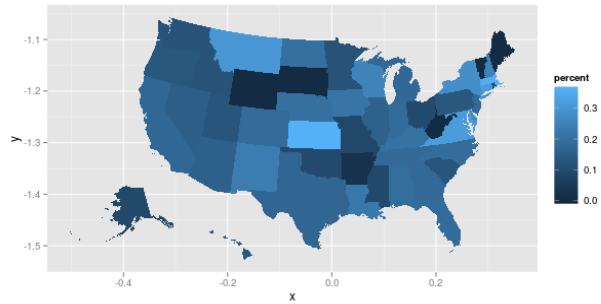
Tribes



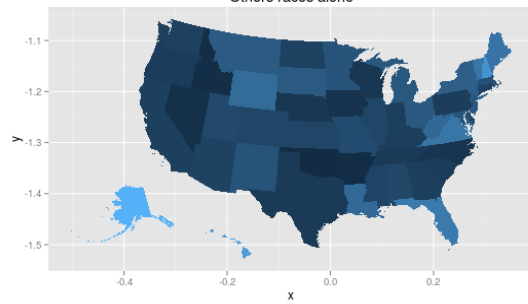
Asian



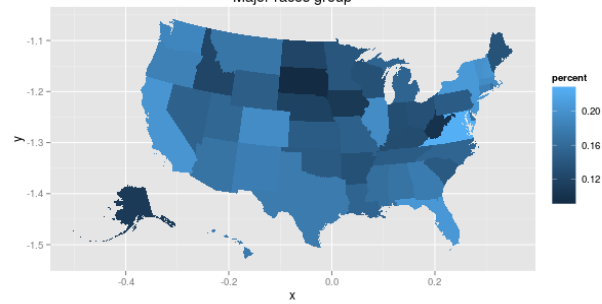
Hawaiian



Others races alone



Major races group



# Findings

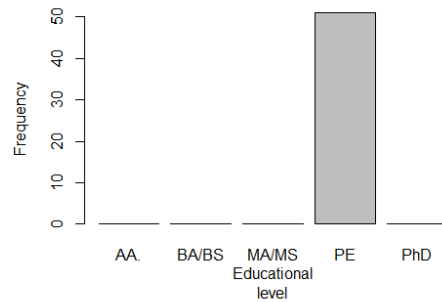
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- Question 3

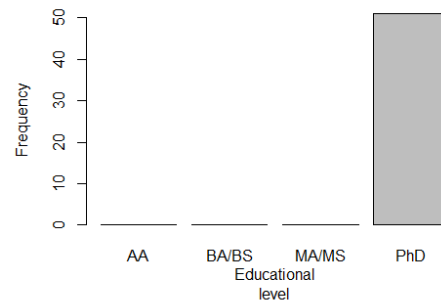
- The educational degree with highest average salary is “Professional degree beyond Bachelor’s degree” in all fifty states.
  - Location is related with the average income of people holding the same educational degrees.
  - People having higher educational degrees would be more likely to have higher average income.
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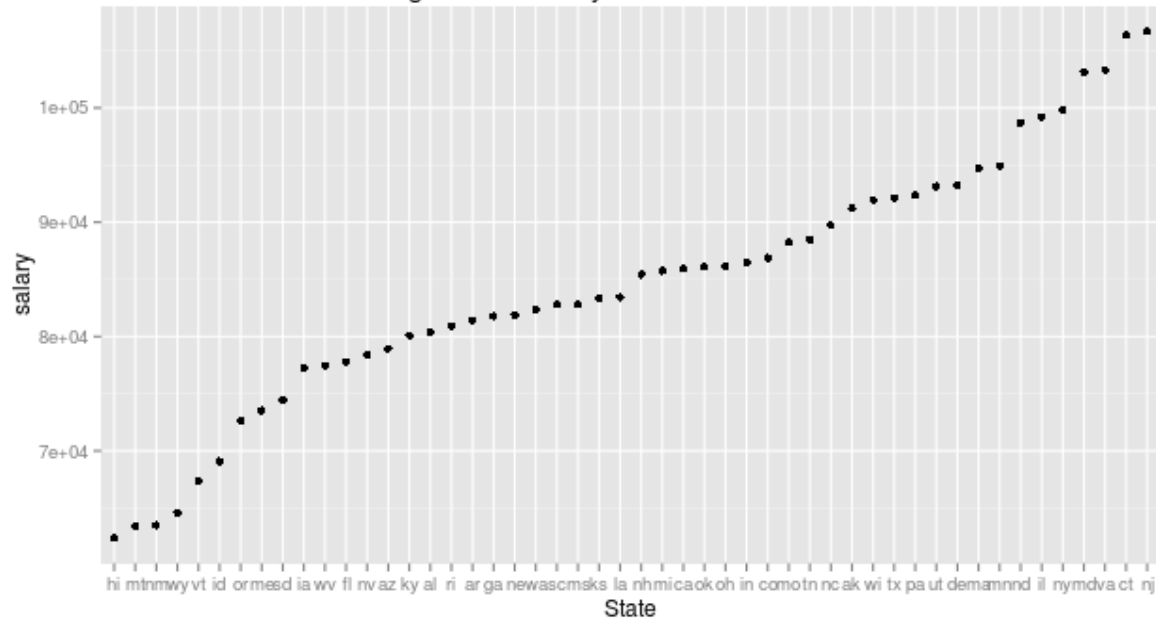
Histogram of Educational level with highest income



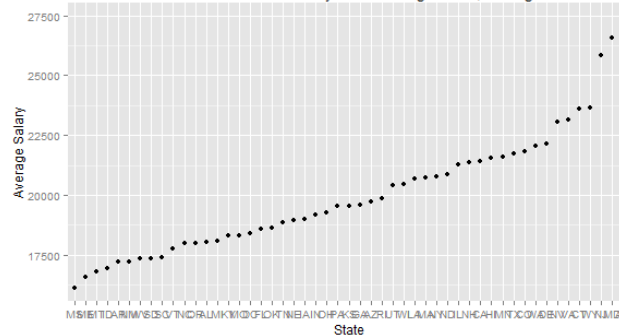
Histogram of Educational level with highest income



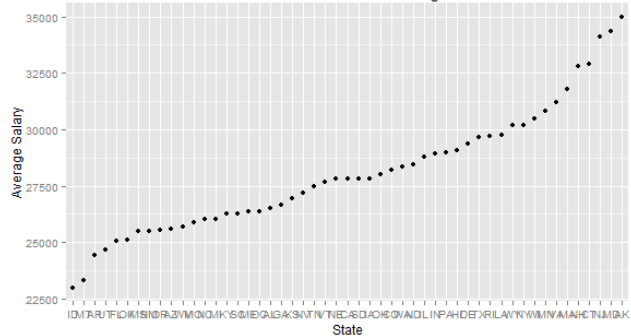
Highest income by state/educational level



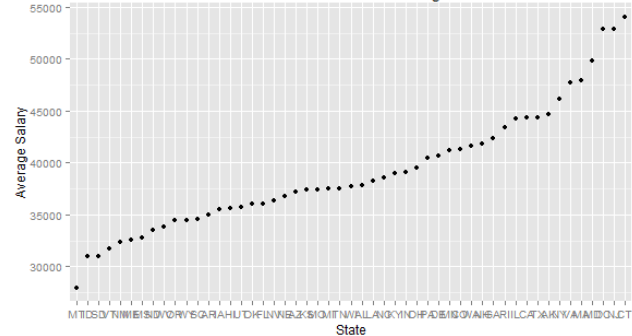
Individual with one or more years of college credit, no degree



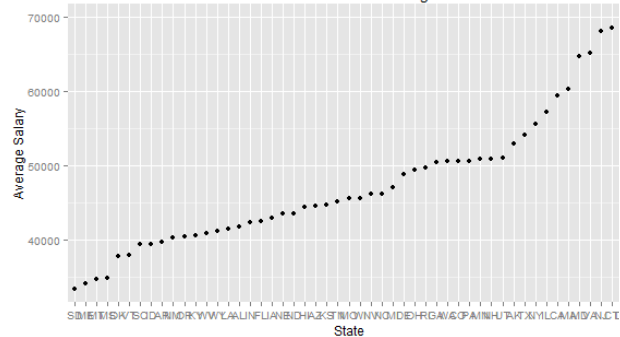
Individual with Associate's degree



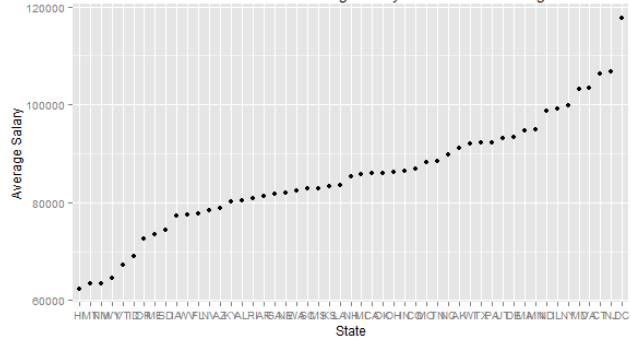
Individual with Bachelor's degree



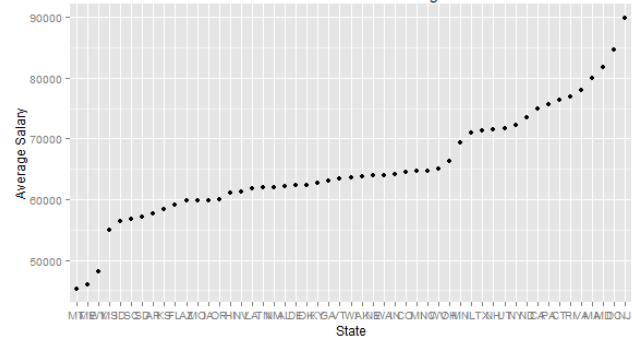
Individual with Master's degree



Individual with Professional degree beyond a bachelor's degree



Individual with Doctorate degree



# Obstacles

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- Filter useful information and combine data sets.
  - Process data in R by using **dplyr** and display the findings graphically.
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# Future Questions/Work

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- Explore more characteristics of those who continue their education past secondary school.
  - Experiments to find causal relationships between the characteristics and levels of educational attainment.
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