

College Critics

Victoria Velasquez, Hartland Brown, Rami Alqunaibit

Questions

- Do institutions with graduating debt tend to have higher graduating income?
- Do institutions with higher faculty salary tend to have higher levels of completion?
- Do institutions with higher acceptance rates tend to have higher levels of debt on graduation?
- Do institutions with higher graduation rates tend to have higher levels of debt on graduation?

kaggle



Data Preparation Work

- Cleaning the data
 - Many NULL values
 - Some schools do not provide certain data
 - No metadata on year
 - Variables were unclear and poorly named - had thoroughly read through data to find variables

Tools



pandas

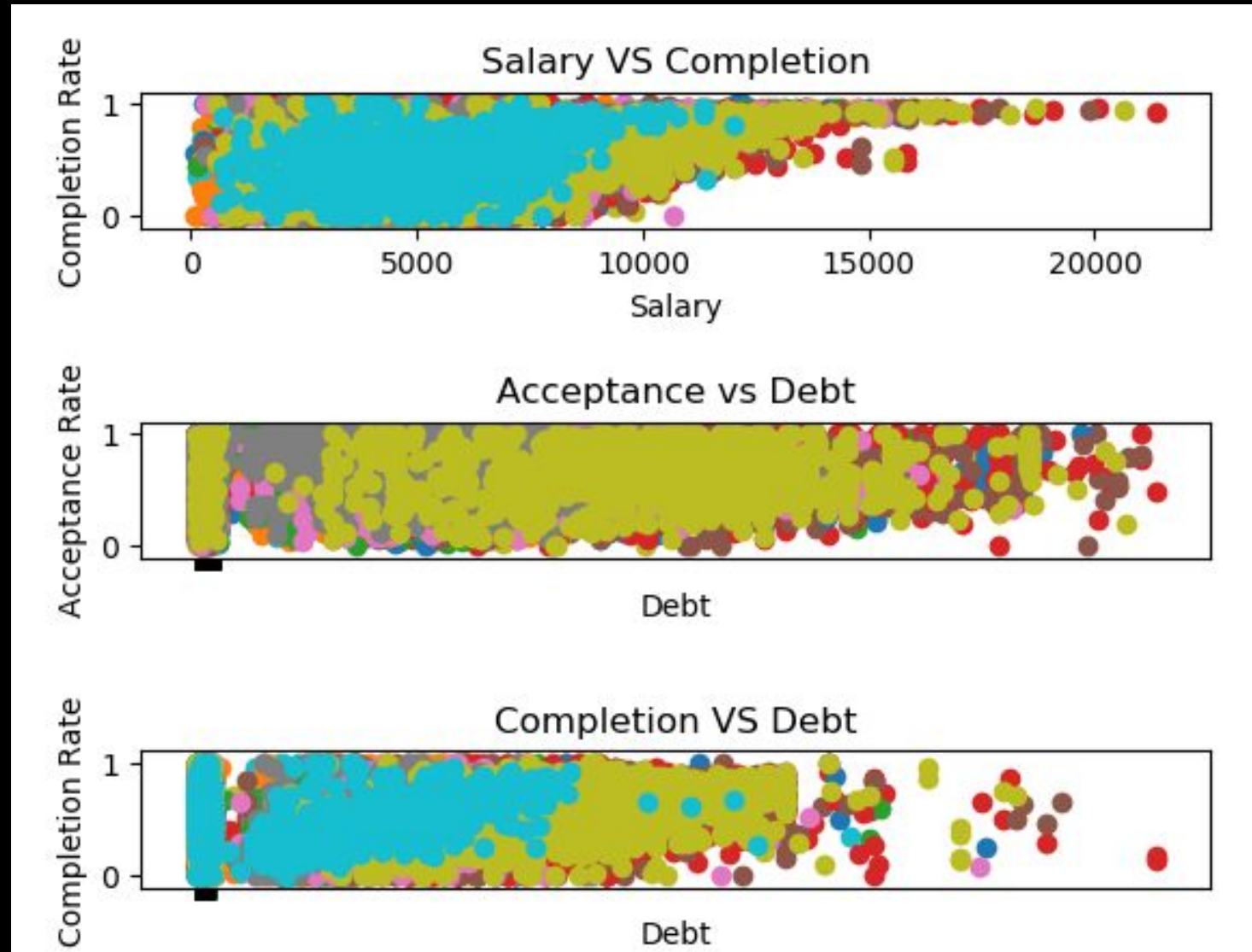
$$y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$$
The pandas logo, with the word "pandas" in a white, lowercase, sans-serif font, and the equation $y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$ in a smaller, italicized, blue font below it.

Classification

- Debt relating to income
 - Low, Medium, and High earning groups

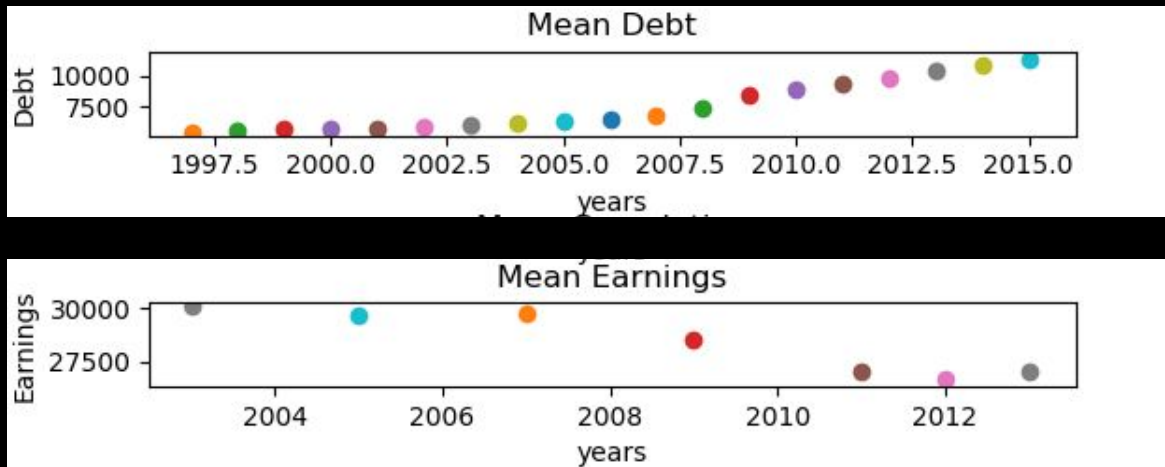


Knowledge Gained – Acceptance, Completion, Debt

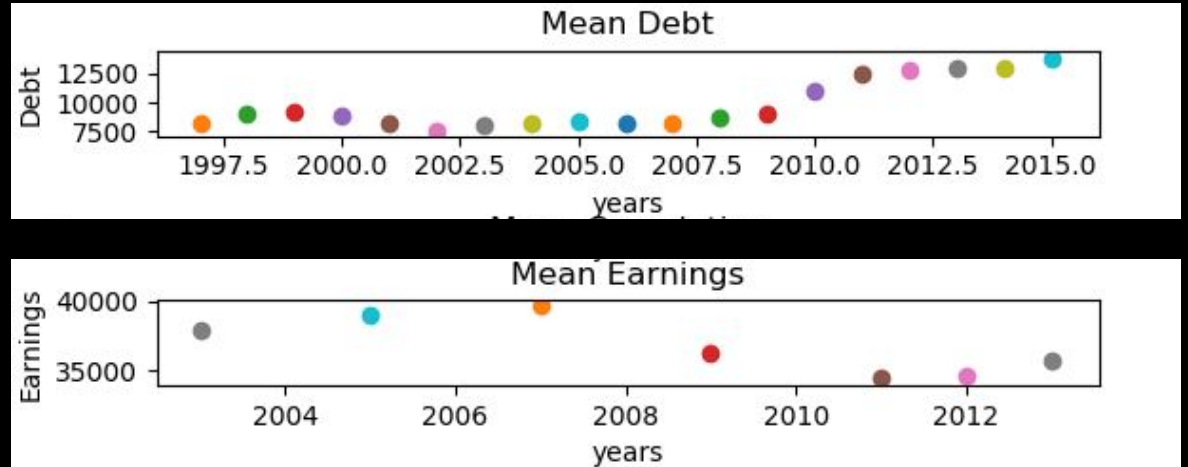


Knowledge Gained – Graduate Debt and Earnings

National Data

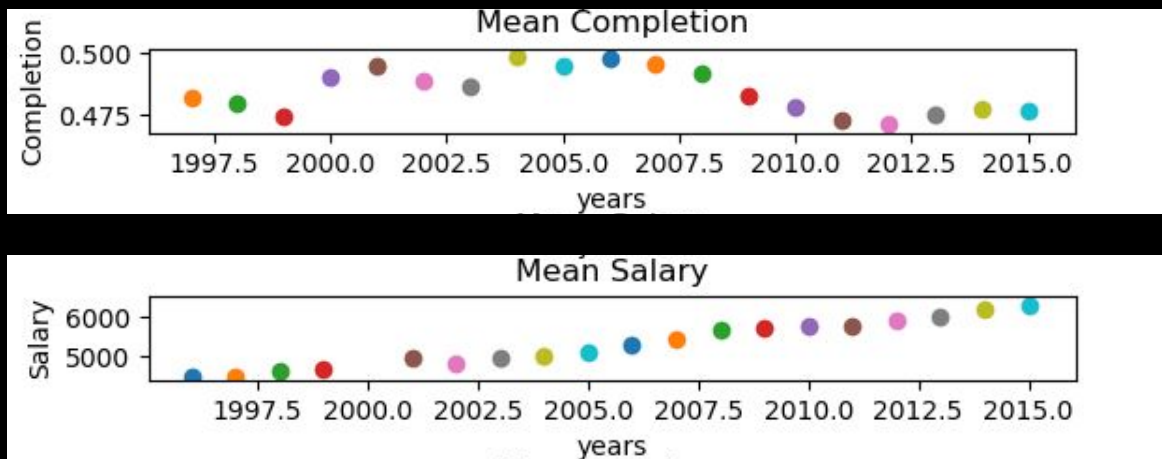


CU Boulder Data

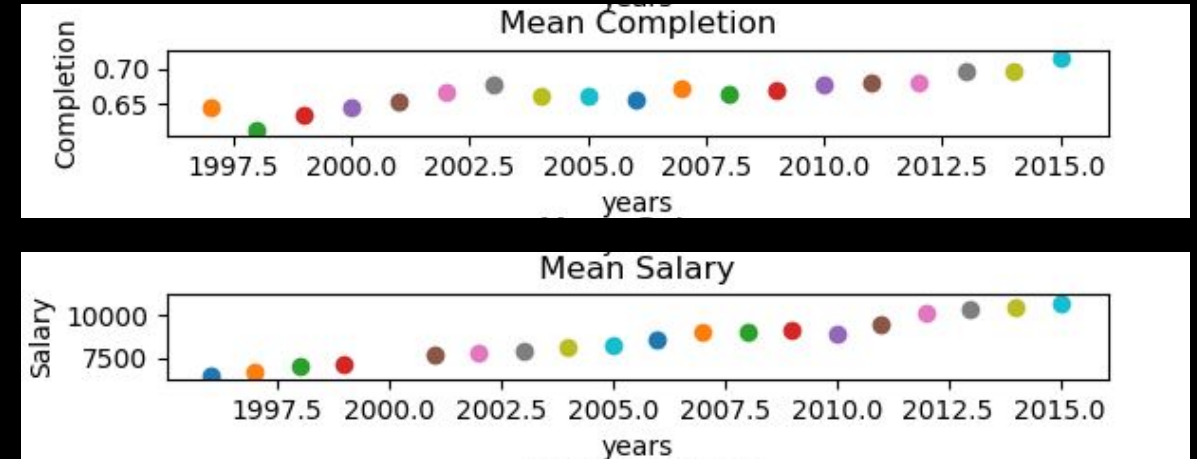


Knowledge Gained – Teacher Salary & Completion

National Data



CU Boulder Data



How that knowledge can be applied

- Choosing schools to attend
- Deciding on how much debt is a reasonable amount to acquire

Support and Confidence:

- 68.77% of schools released data about debt (support: 0.6877)
 - 67.25% of schools have students with average debt < \$15,000 (support: 0.6725)
 - 8% of schools have students with debt < \$15,000 and with earnings greater than \$30,000 (confidence: $(\text{Debt} < 15,000) \Rightarrow (\text{earnings} > 30,000) = 0.08$)
- Only 28% of schools released data about completion rate (support: 0.2846)
 - 54% of schools have a completion rate of > 50% (Support: 0.54)
 - 19% of schools with a completion rate > 50% have earning > \$30,000 (Confidence: $\text{Comp} > .50 \text{ to } \text{earnings} > 30,000 = 0.19$)