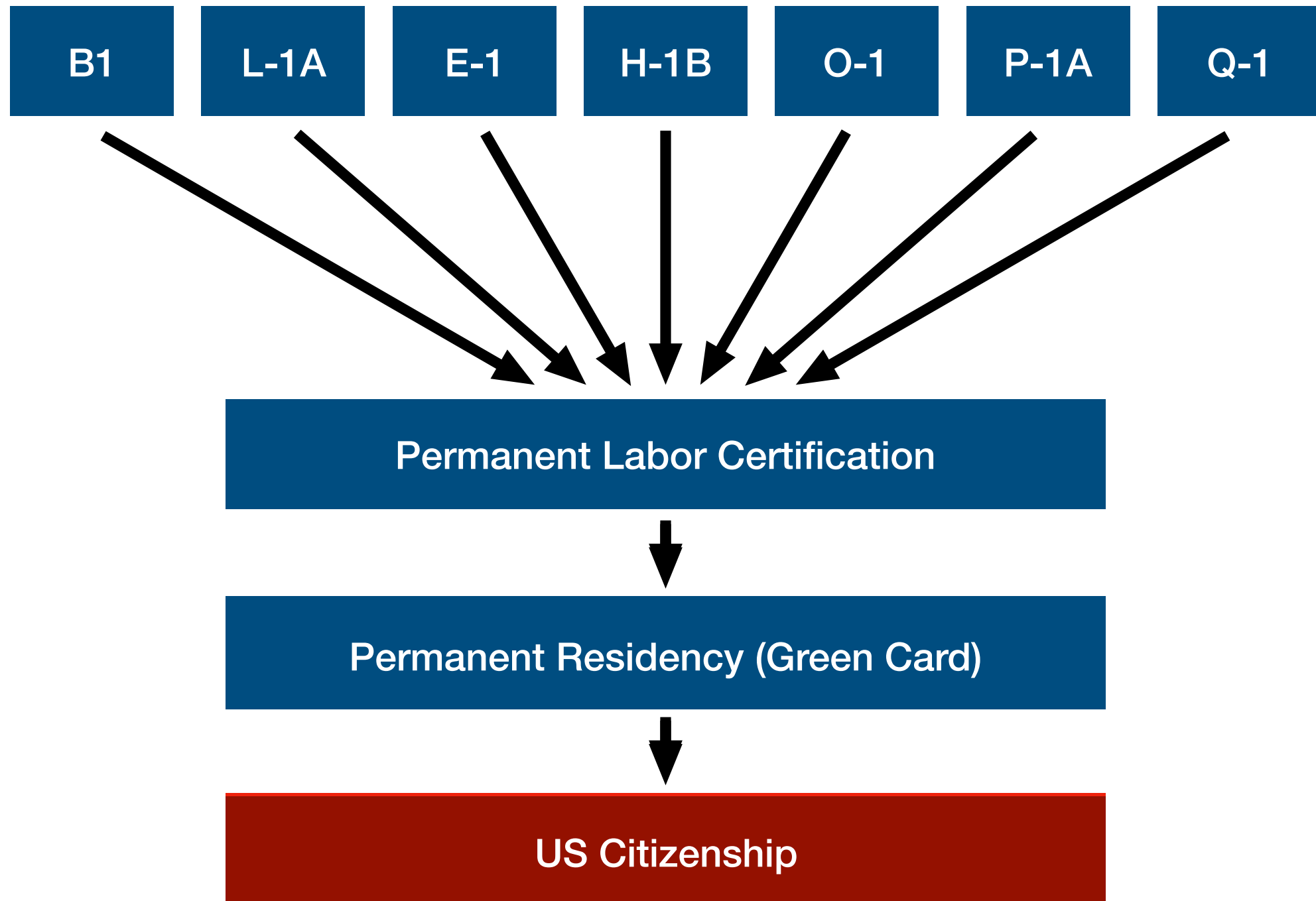


US Permanent Visa Application



Jay Cheong
Aug 7, 2019

What is Permanent Visa?



Methodology & Result



+



- PERMANENT VISA DATA
- APPLICANT INFO (153 FEATURES)
 - ✧ EDUCATION ✧ HOME COUNTRY
 - ✧ SALARY ✧ JOB TITLE ✧ JOB LEVEL

- WORLD LITERACY RATE



Engineered Feature

GridSearchCV

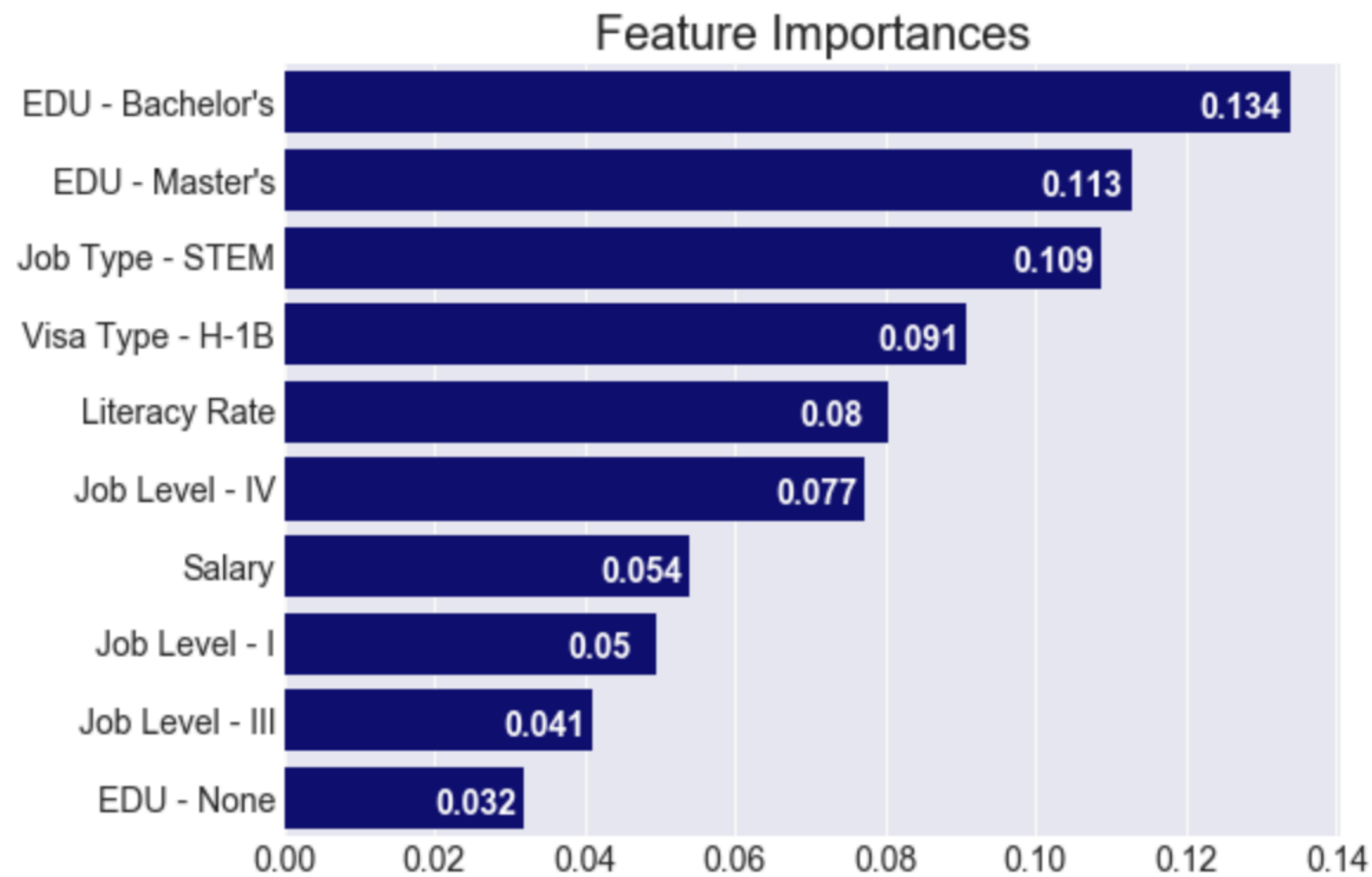
ADASYN

Random Forest

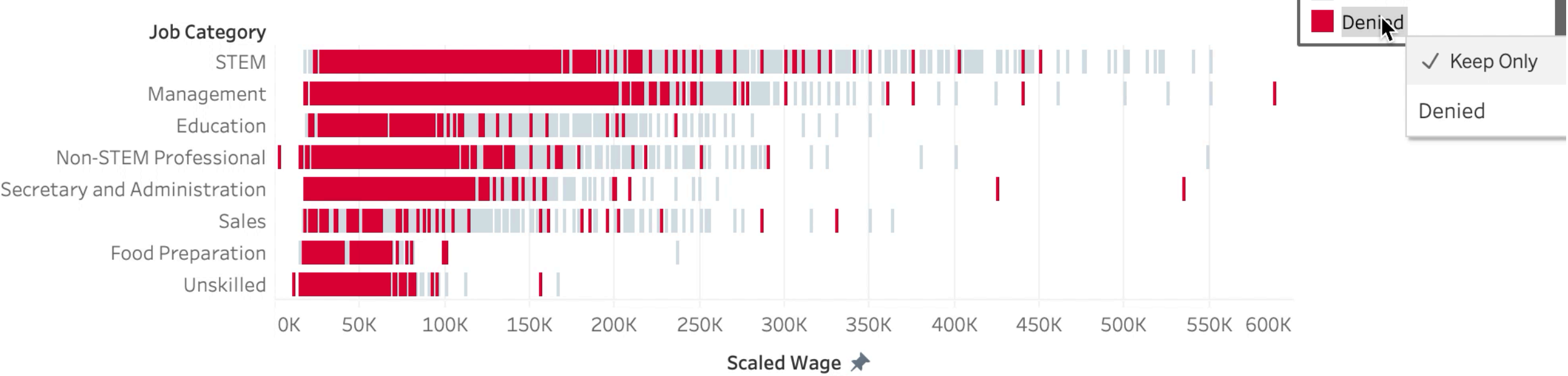


ROC-AUC = 0.71

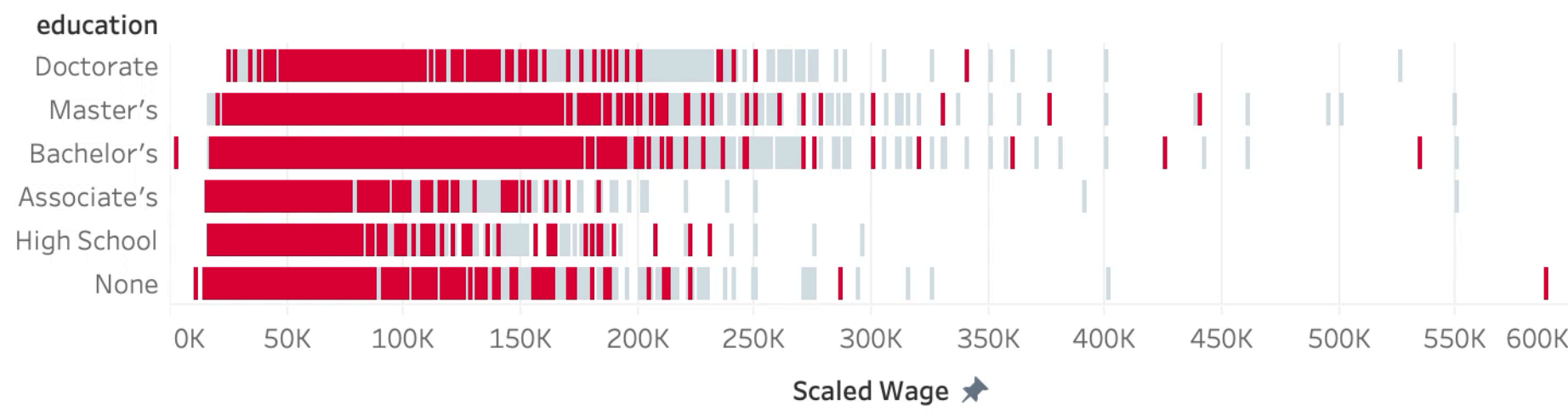
Random Forest suggests that the following features are the most informative to make prediction:



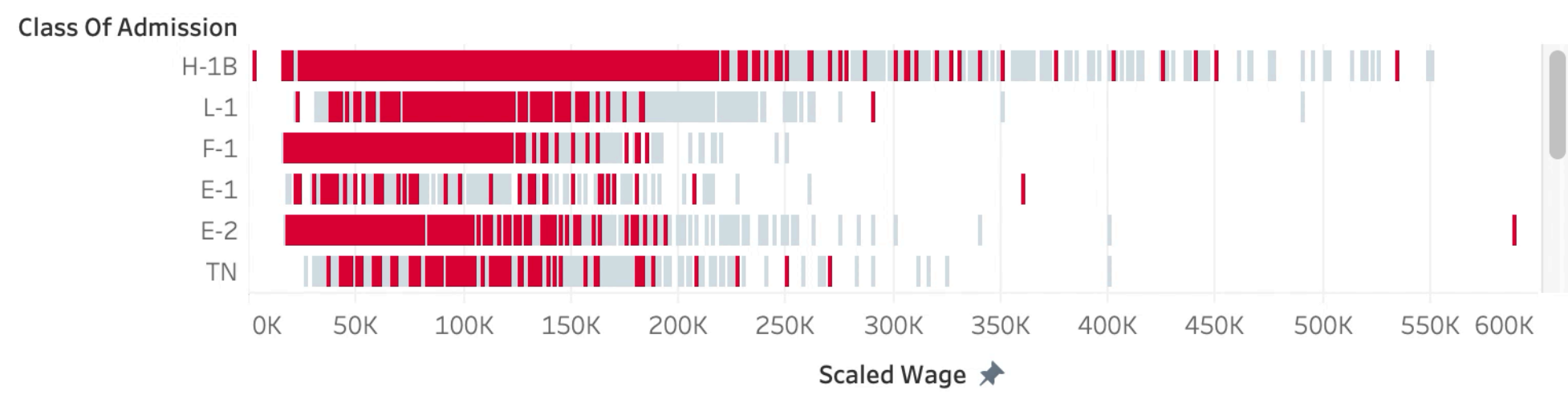
Job Category - Salary Plot



Education - Salary Plot



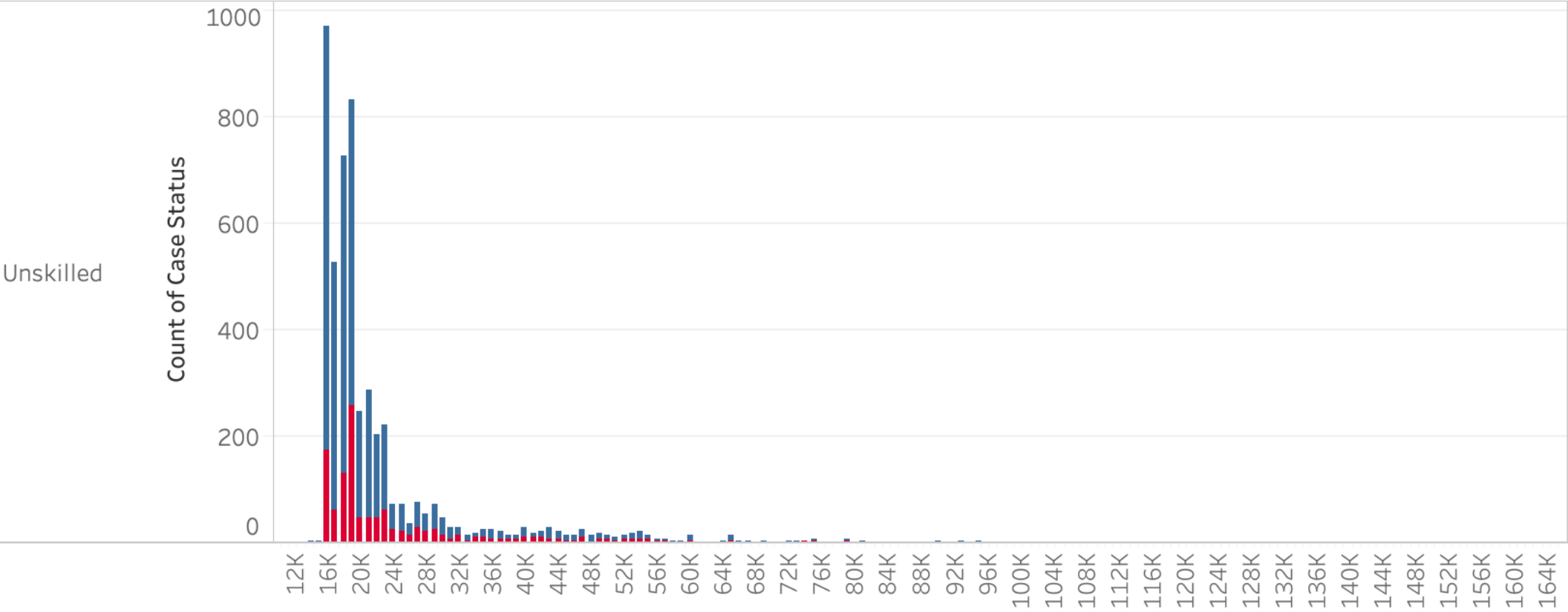
Class of Admission - Salary Plot



Unskilled Histogram

Job Category

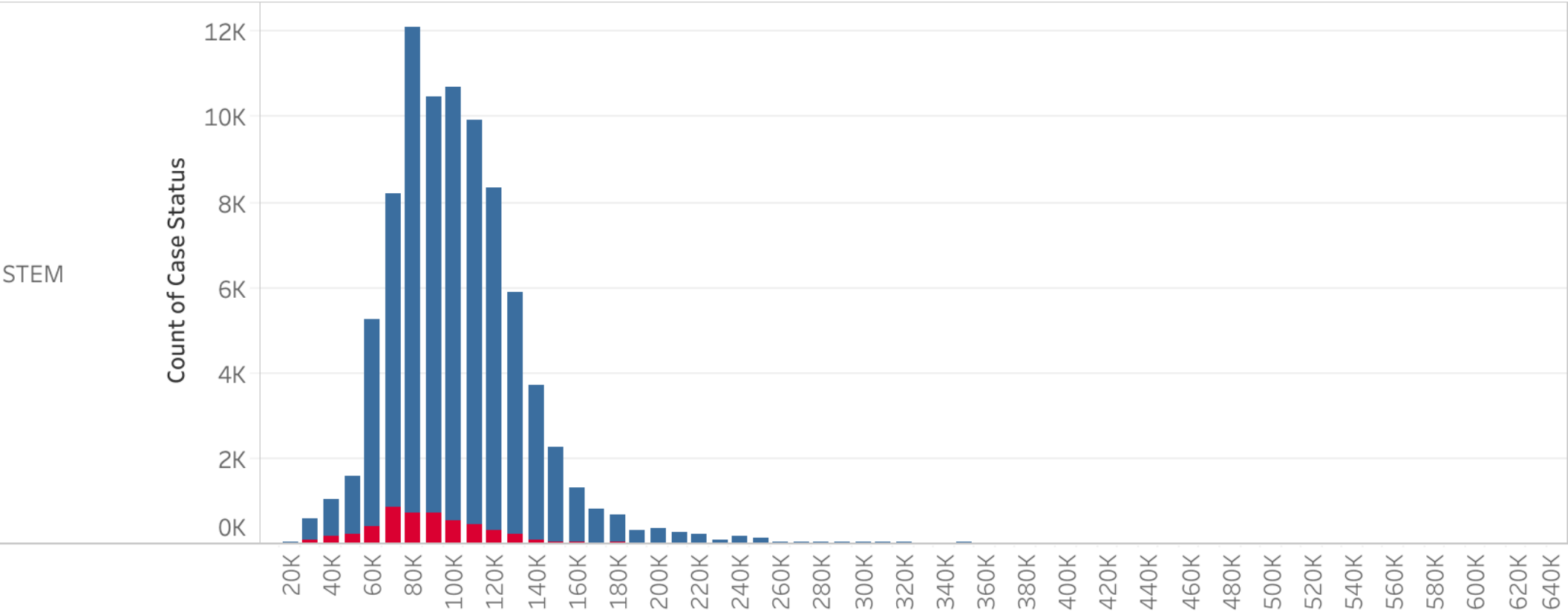
Scaled Wage (bin) 2



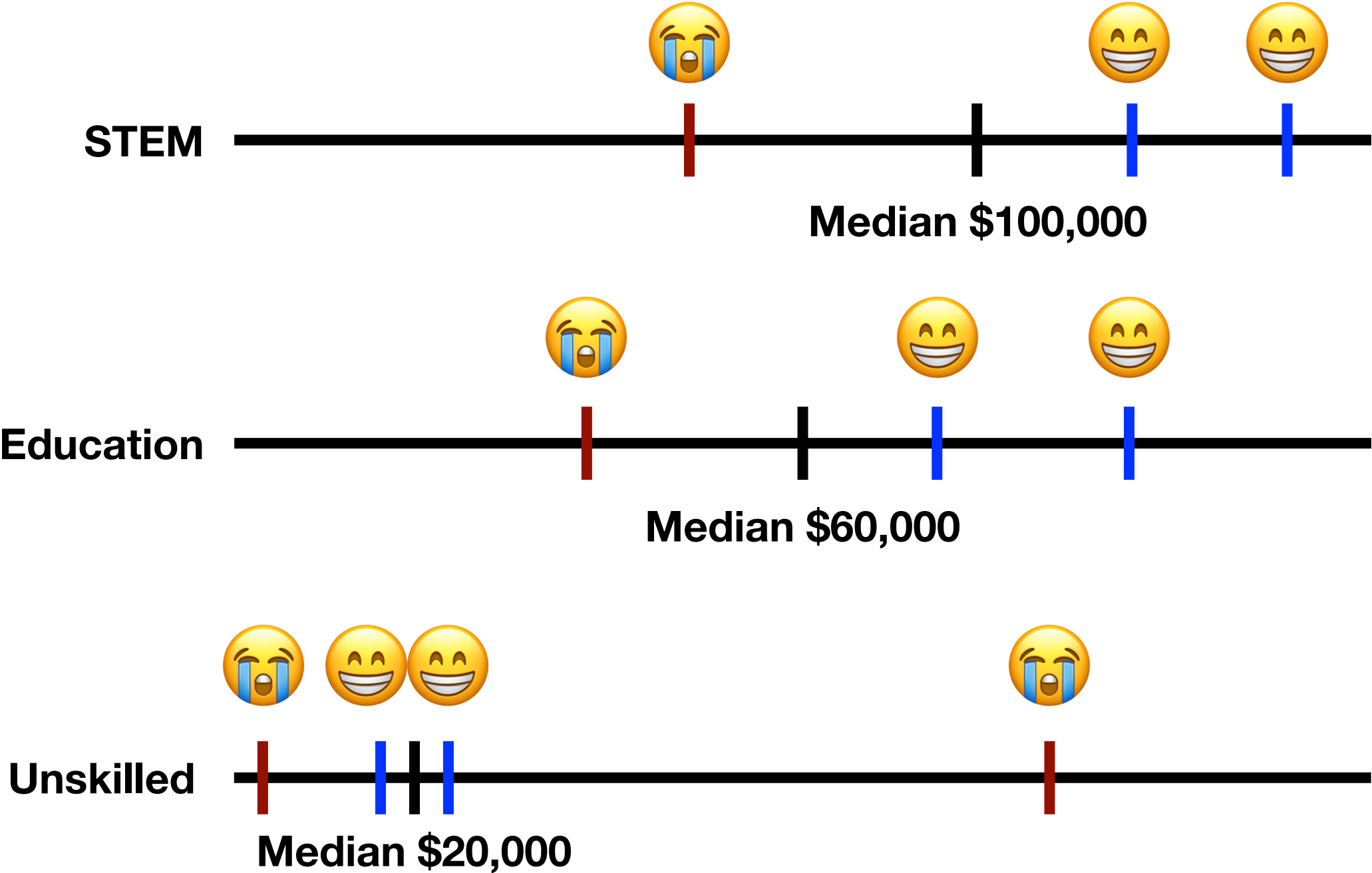
STEM Histogram

Job Category

Scaled Wage (bin)



Category Median Wage Deviation Ratio



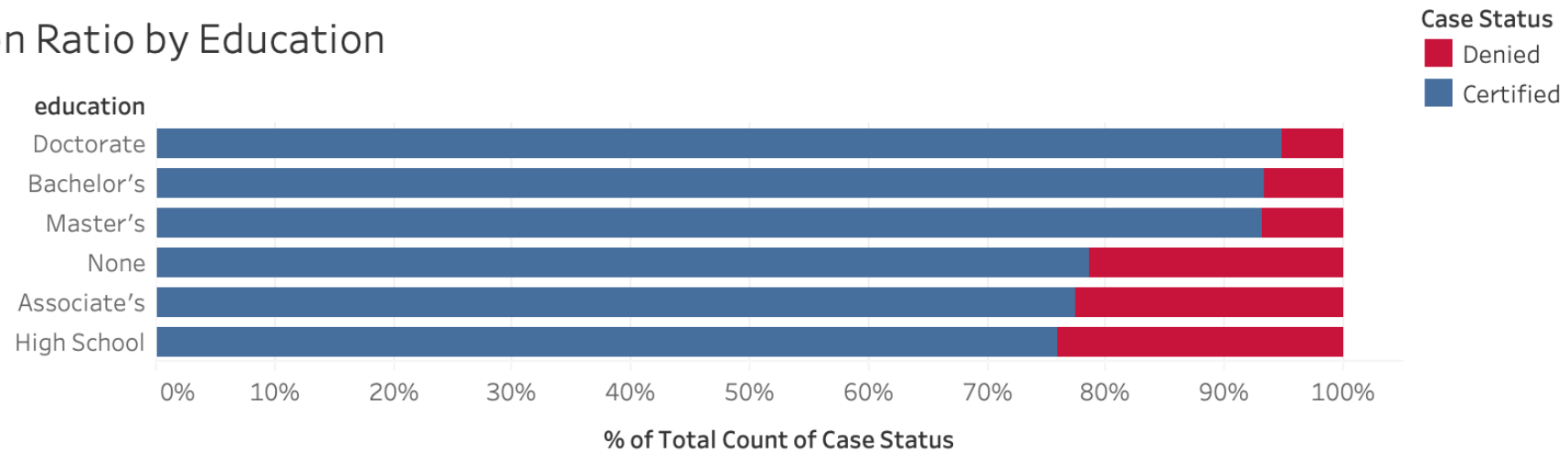
Conclusion

To have highest chance of getting PERM approved, applicants should:

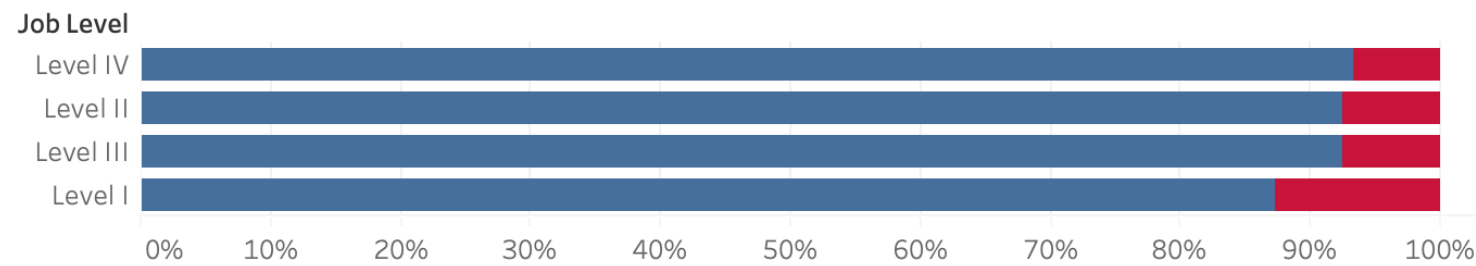
- Get a high level STEM job under H-1B visa
- At least have a Bachelor's Degree
- Have higher salary relative others in the same field

Appendix

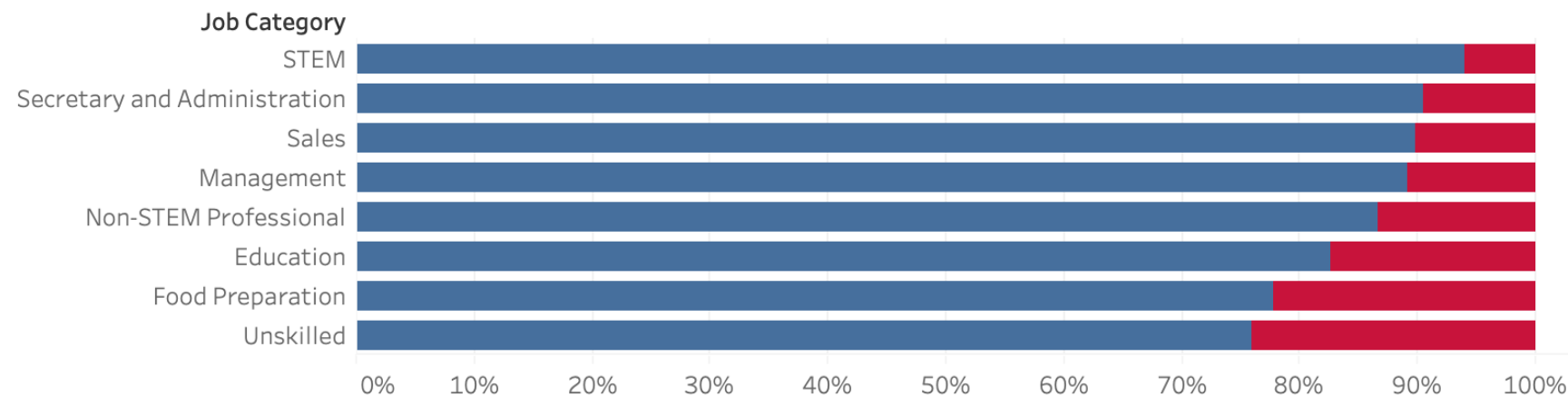
Certification Ratio by Education



Certification Ratio by Job Level



Certification Ratio by Job Category



Appendix

Job Catrgory Avg Wage

