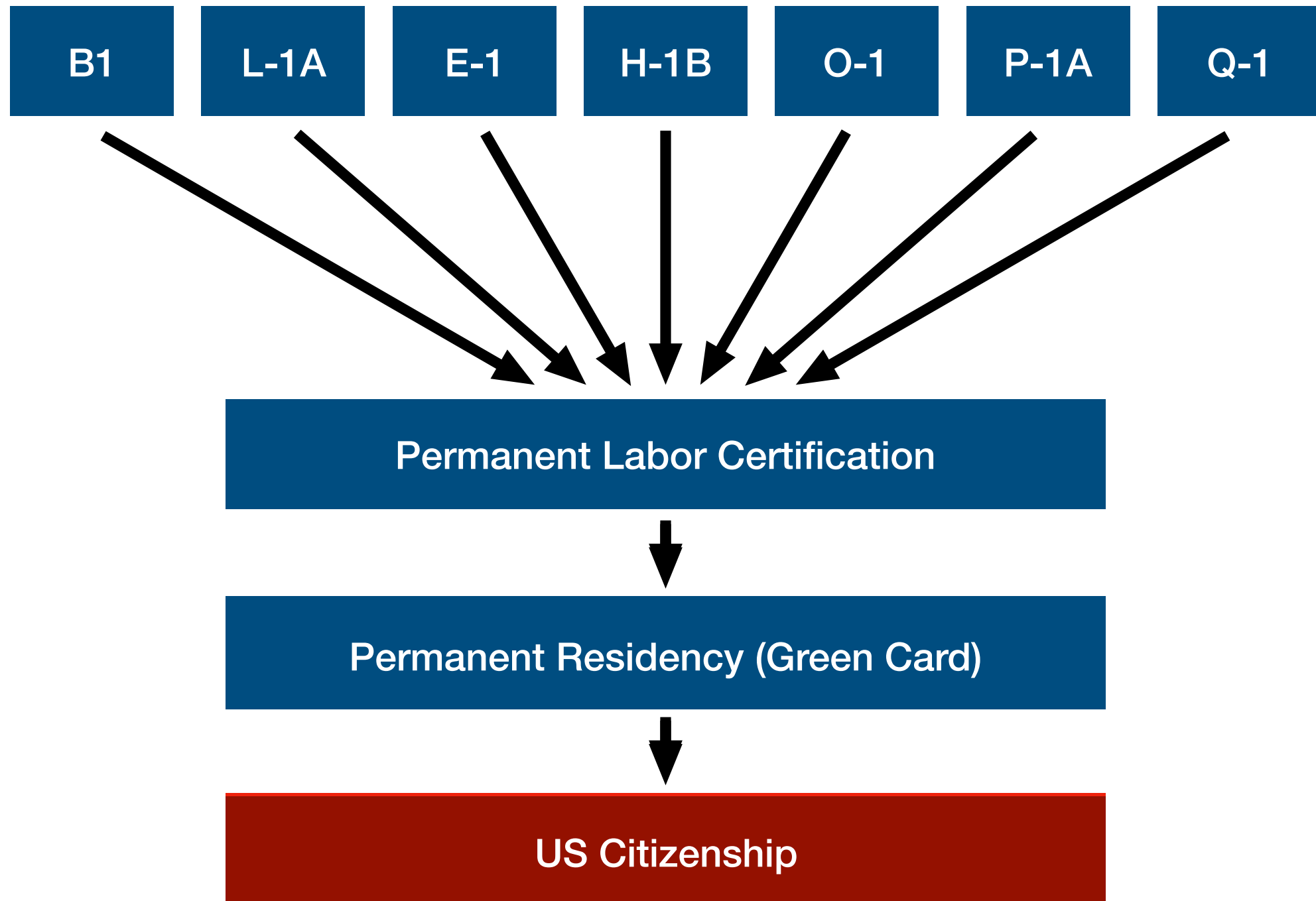


US Permanent Visa Application



Jay Cheong

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

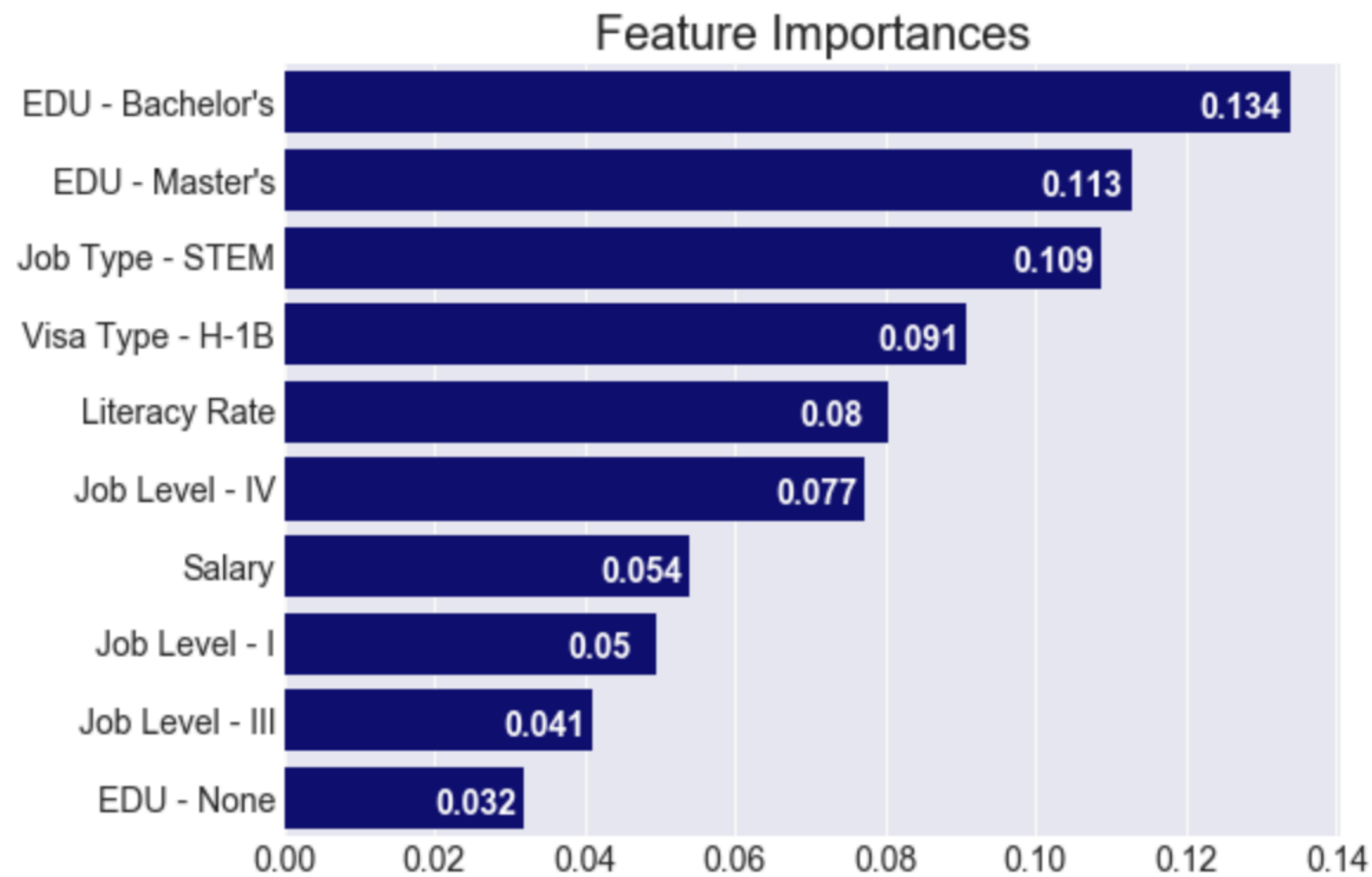
ADASYN

Random Forest

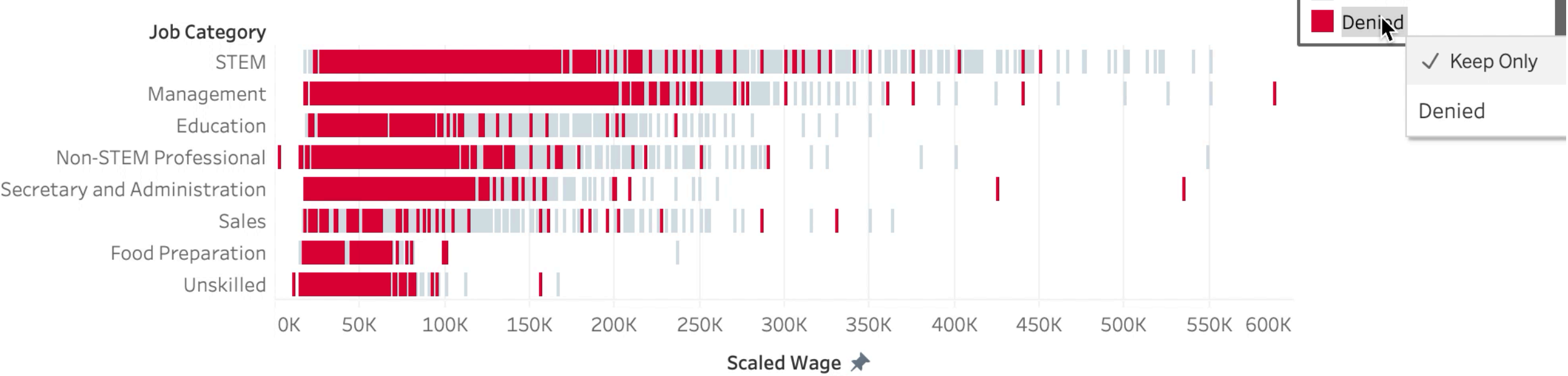


ROC-AUC = 0.71

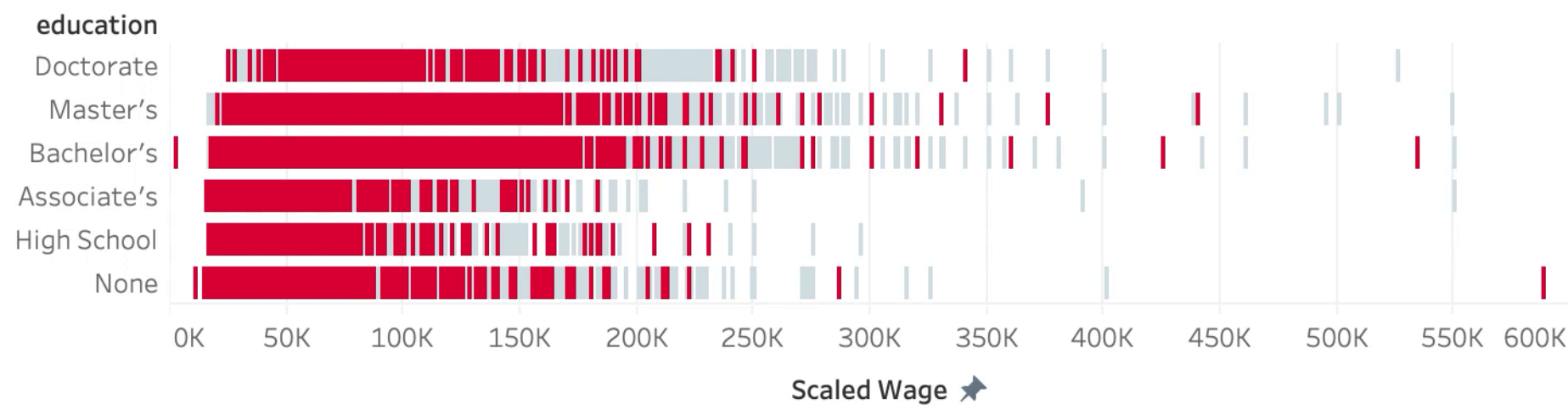
Random Forest suggests that the following features are the most informative to make prediction:



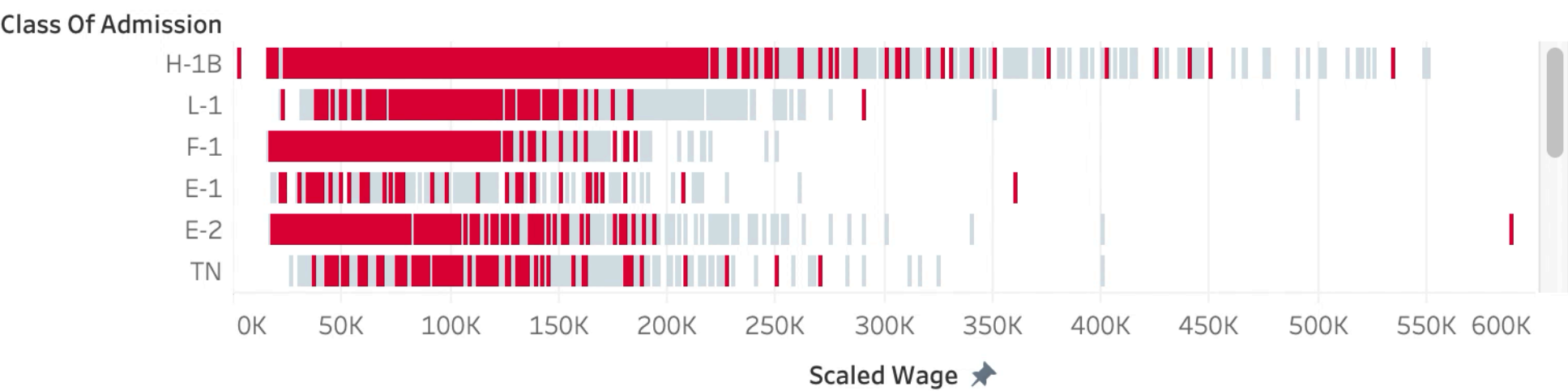
Job Category - Salary Plot



Education - Salary Plot



Class of Admission - Salary Plot

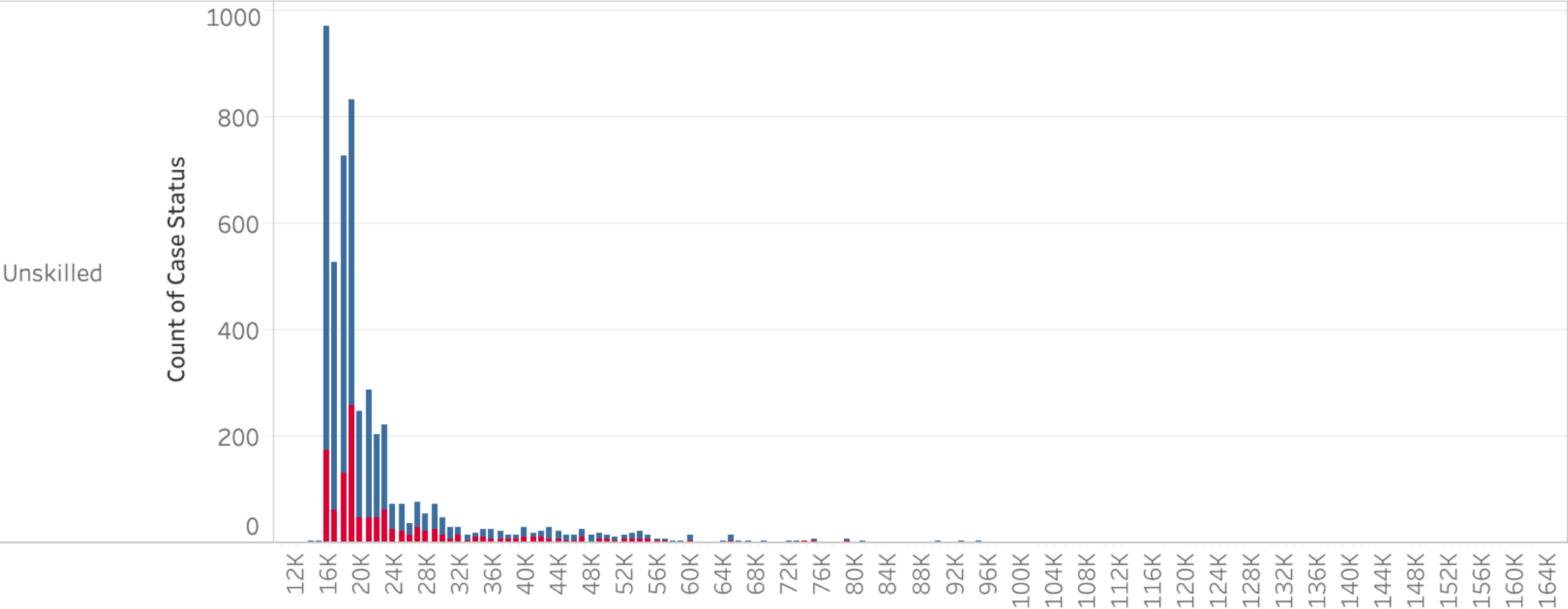


Unskilled Histogram

Job Category

Scaled Wage (bin) 2

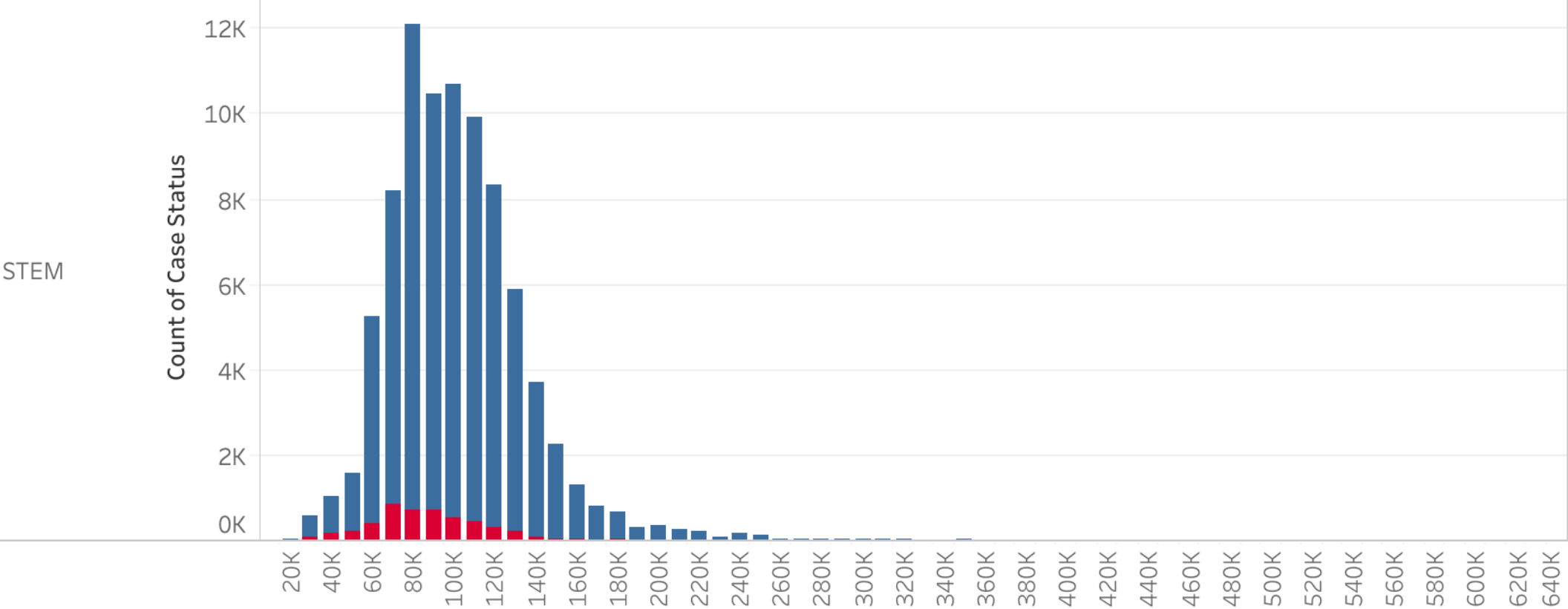
- Case Status
- Certified
 - Denied



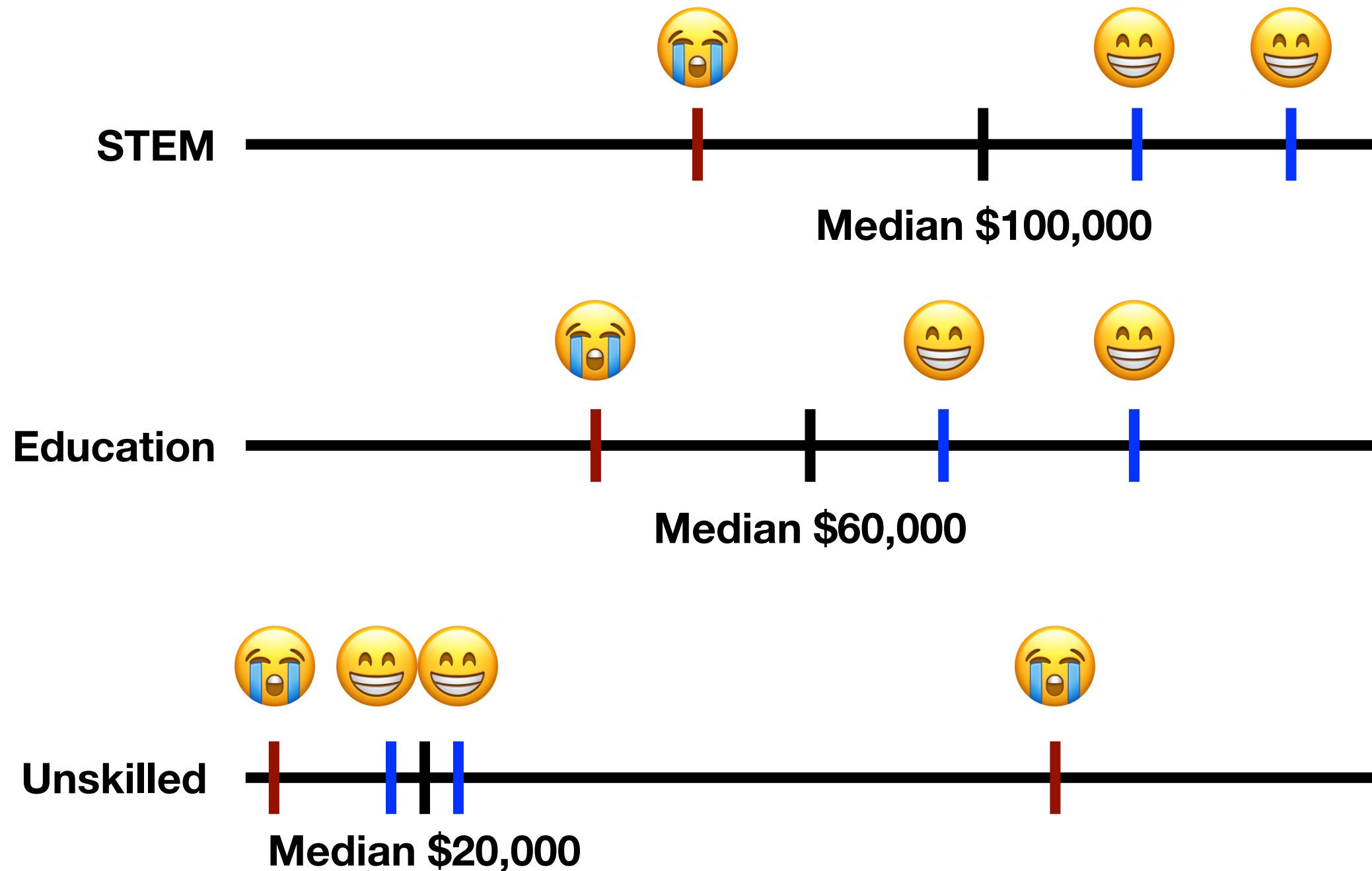
STEM Histogram

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