

1. INTRODUCTION

The H-1B is a visa in the United States under the Immigration and Nationality Act, section 101(a)(15)(H) which allows U.S. employers to employ foreign workers in specialty occupations.

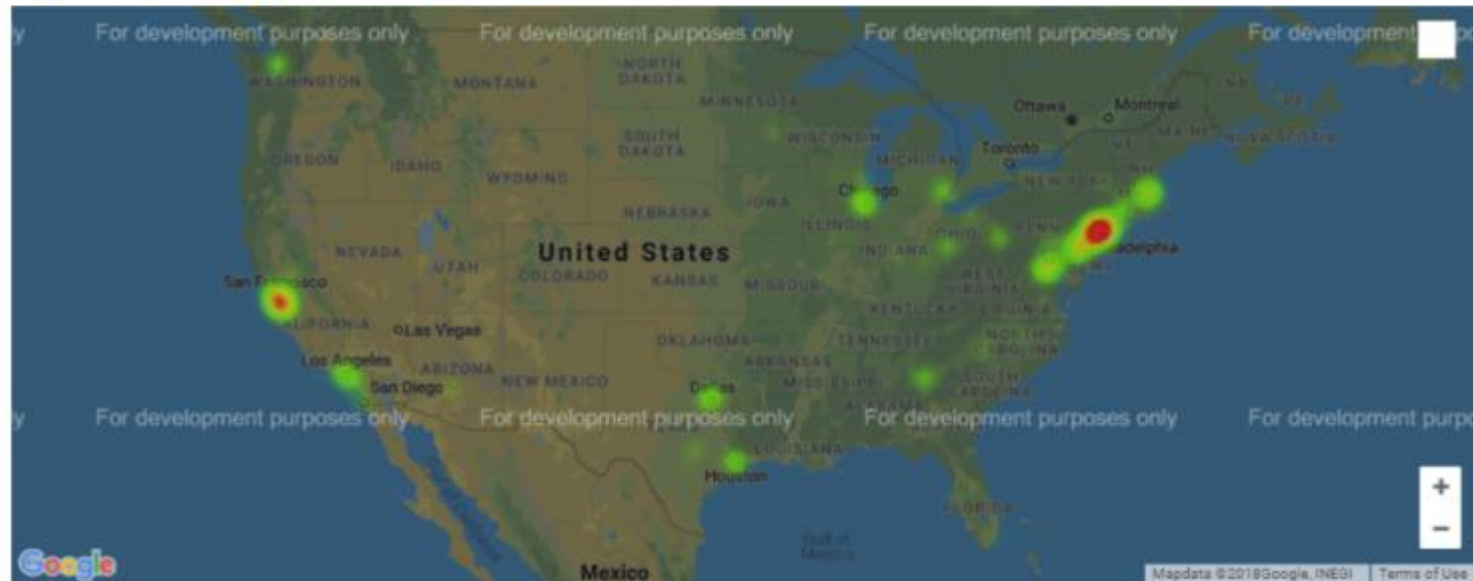


photo is from : <https://www.deccanherald.com/international/former-disney-employees-drop-lawsuit-against-it-over-h1b-visa-abuse-669429.html>

2. MOTIVATION AND GOAL

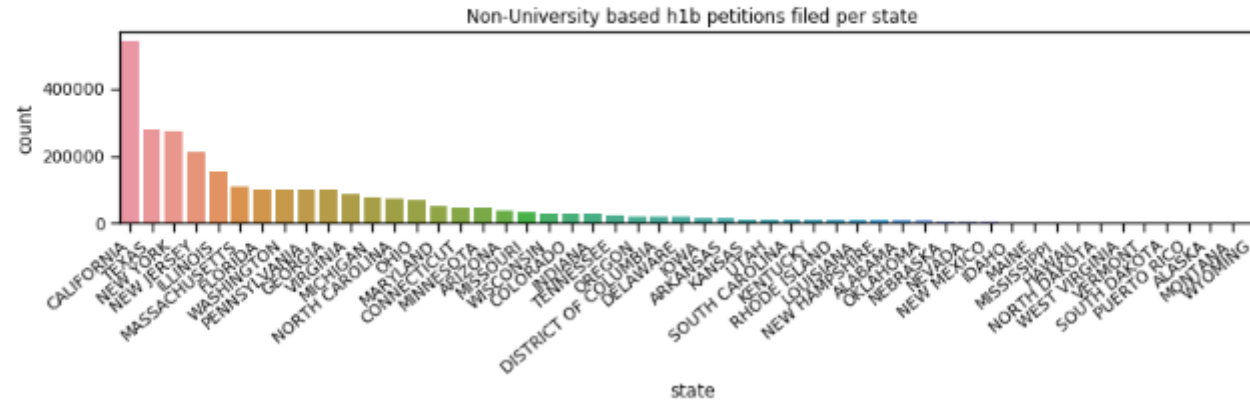
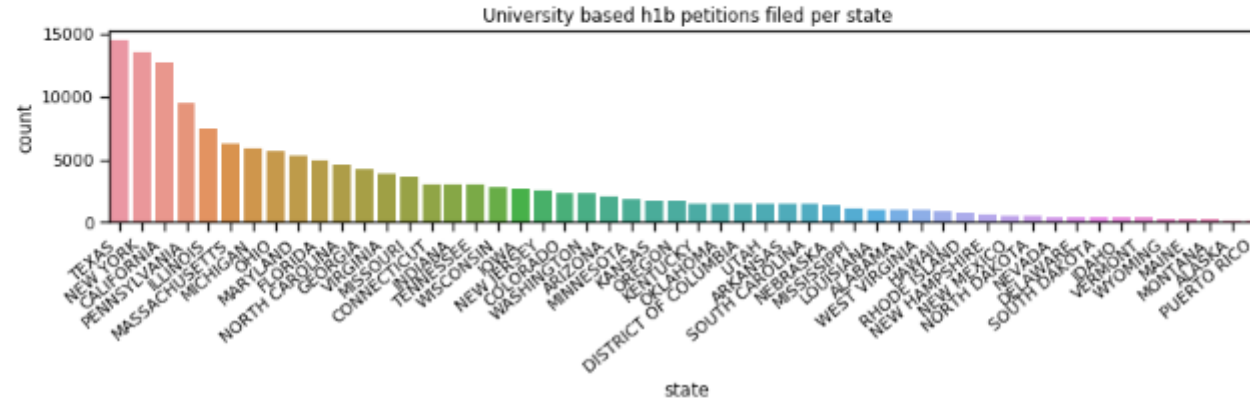
- i) a helper in university application process
- ii) a database to go to during job hunting
- iii) a predictor for H1B application result

3. H1B APPLICATION DENSITY



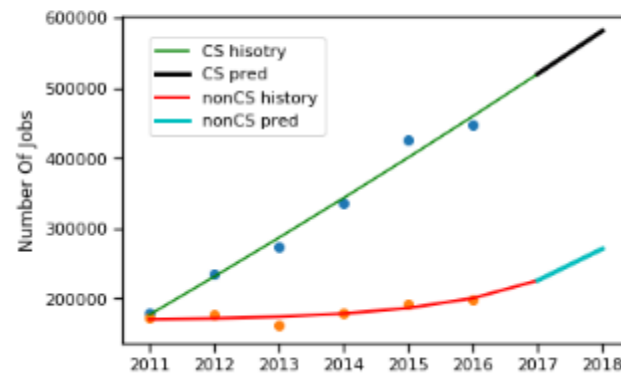
4. H1B APPLICATION PER STATE : ACADEMIA VS INDUSTRY

Texas universities/colleges have filed the most number of H1B application. And California has the most industry job opportunities for foreign works.



5. CS VS NON-CS JOBS H1B APPLICATION FROM 2011-2018

CS related jobs increases faster than the nonCS jobs and the rate of increase for all jobs seems to slow down at 2015.



6. IMBALANCED DATA CLASSIFICATION

The application results are very imbalanced and need resampling techniques to deal with. I have used SMOTE techniques, Synthetic Minority Over-sampling Technique, to make all classes equally distributed which can be used for further machine learning techniques.

