

## 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.

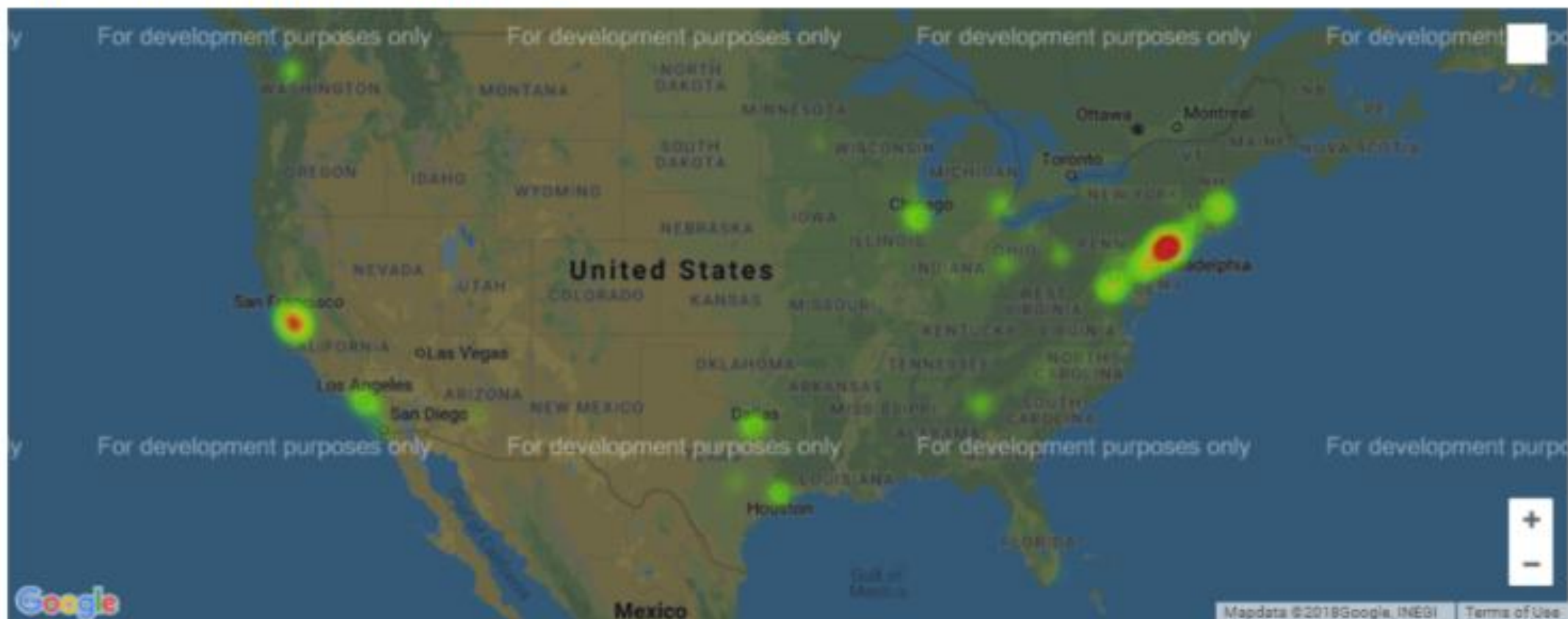


photo is from : <https://www.deccanherald.com/international/former-disney-employees-drop-lawsuit-against-it-over-h1b-visa-abuse-669429.html>

## 2. MOTIVATION AND GOAL

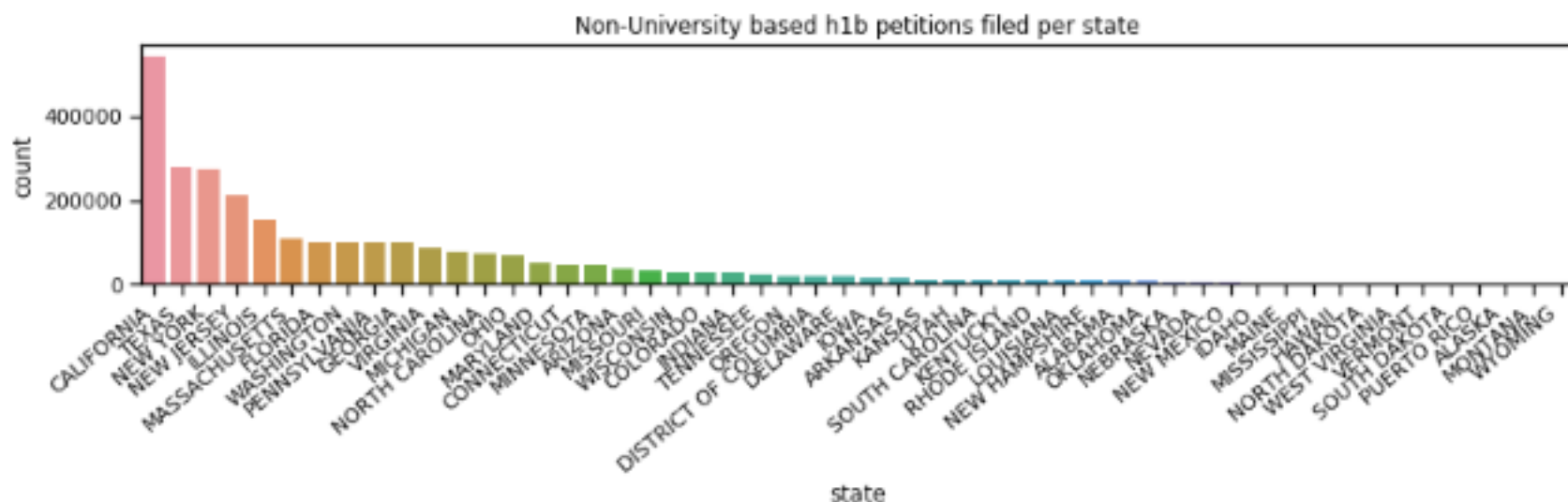
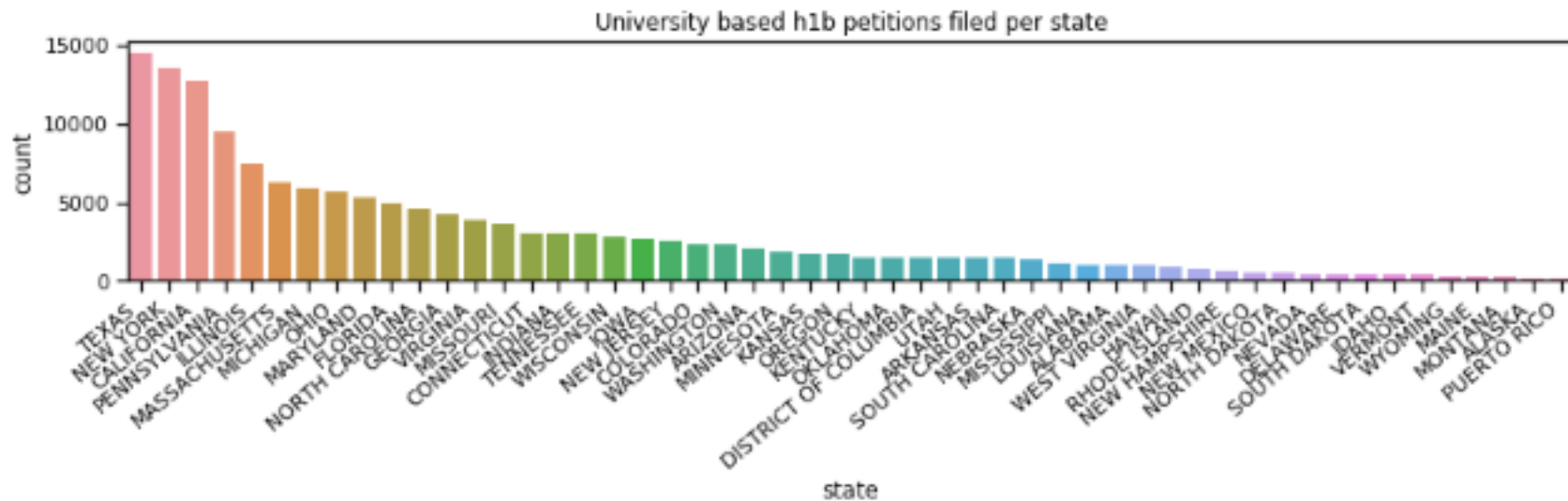
- i) a helper in university application process
- ii) a database to go to during job hunting
- iii) a predictor for H1B application result

## 3. H1B APPLICATION DENSITY



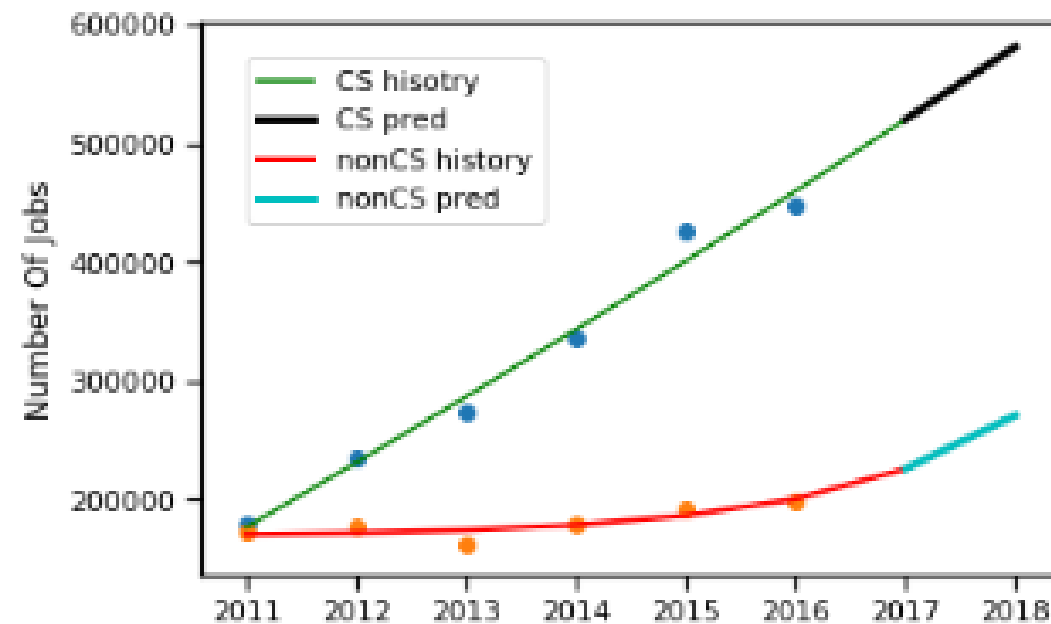
#### 4. H1B APPLICATION PER STATE : ACADEMIA VS INDUSTRY

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.

