## Where Should You Work?

A common dilemma most people will have is competition in the job market when trying to find a job. To measure this competition, we grouped by industry and used the variable "applies" to indicate competition, since it referenced number of people applying to a job on a given day per industry, and divided by the variable "employerJobCount", since it indicated count of job per employers by industry. As we can see, lower ratio means lower applies of job in comparison to the supply of jobs available, so the lower the ratio the smaller the competition to the amount jobs demanded by the industry for a given employer. We mapped the ratio for each industry over time to see the general trends, and found that many of the sectors with higher ratios (media, legal, government, agriculture, and work-at-home) are generally much more volatile than industries with lower ratios.

Since the majority of our group members are international students interested in landing a job in the U.S post-graduation, we considered how those seeking H-1B visas could optimize their job opportunity in the U.S. In other words, what are the best states to for international students look and apply for jobs and get H-1B visas approved? So, we joined the Indeed data with an external H-1B visa dataset. We then aggregated the chance of getting visa ratio by each state and mapped it. The darker the state appears, the more chances of applicants getting H-1B visas in that state.