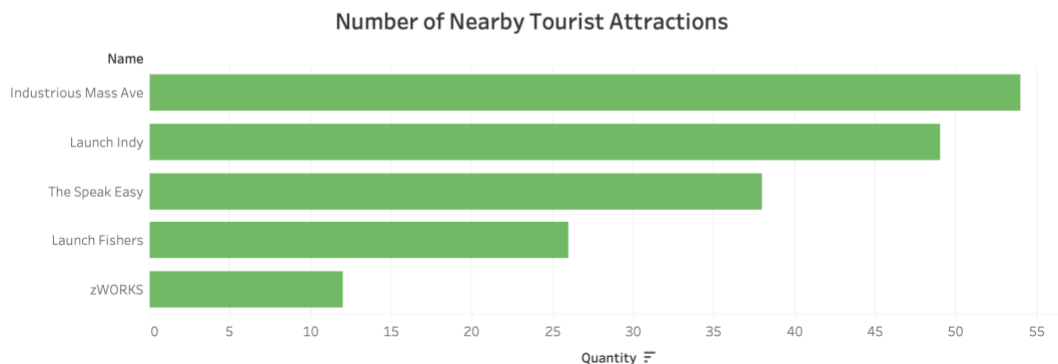


XTERN 2022 DATA SCIENCE WORK SAMPLE

The Argument for Selecting Industrious Mass Ave.

SUMMARY

This report details the investigation into five separate candidates for a coworking location for summer interns. Following the collection of data for over 700 establishments ranging from bars to aquariums in multiple areas of Indianapolis, I have concluded that Industrious Mass Ave is best suited for the desired use. Criteria for this decision include the distance from supplied housing as well as the quality, price ranges, diversity, and available hours of businesses easily accessible from either the coworking location or housing.



Note that the majority of these attractions are parks and museums. When these are excluded, the relative diversity of the attractions around Industrious Mass Ave is clear, with nearby access to zoos, aquariums, casinos, bowling alleys, and more.

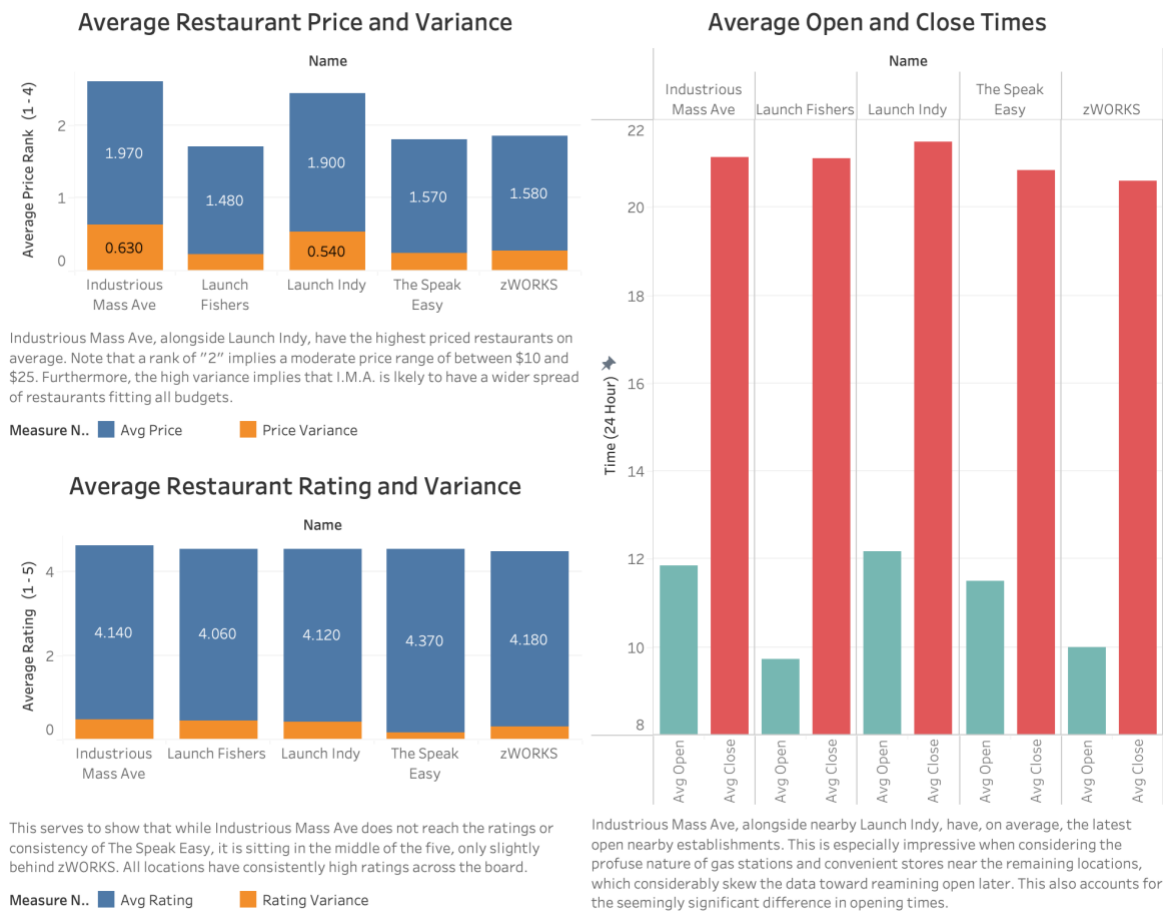
PRICING

Price information was available from Google's Maps API for restaurants and related establishments (these included bars, clubs, coffee shops, gas stations, grocery stores, and more). Upon cleaning and analyzing pricing as reported for 360 business (60 clustered around each location) with minimal missing values, I discovered several significant details. First, the average price for all locations was between 1 and 2 on Google's scale of 4, with 1 and 2 corresponding to less than \$10 and between \$10 and \$25, respectively. This means that any location would fit an intern's budget; they cannot be expected to eat at a fine restaurant every evening. However, the low variance in businesses surrounding Launch Fishers, The Speak Easy, and zWORKS, along with the low average prices, communicates that there is unlikely to be many opportunities to splurge nearby (even moderately) when desired. Industrious Mass Ave and Launch Indy, on the other hand, both reside much closer to IUPUI and downtown Indianapolis, which explains their significantly higher average prices. This should not be considered a negative, as this, when combined with the higher variances, simply represents a more diverse group of restaurants with respect to cost. There are cheap options, but also opportunities to experience the best of the Indianapolis culinary scene.

RATINGS

Restaurant ratings were great across the board. In this area, The Speak Easy stands apart with a distinctly and especially consistent high rating. However, Industrial Mass Ave was not far behind, and did have a higher variance. With proper planning and prior research, you could pick the premier restaurants in either location, and the differences in ratings are not significant enough to suggest an additional 7 kilometers of driving to reach The Speak Easy. Ratings of other businesses including tourist attractions and points of interest such as stores were even more uniform and thus provided little information. As shown above, however, the pure quantity of these businesses is certainly something to be noted. This is another area where Industrious Mass Ave. excels, with up to 5 times the number of attractions as other candidates. Launch Indy also performed strongly by this metric, being so close to Industrious Mass, but as in previous

comparisons, it was slightly behind. It could be beneficial to make use of both locations as times and capacities necessitated, but strictly speaking, Industrious Mass is the superior candidate.



AVAILABILITY

As anticipated, the businesses surrounding Industrious Mass Ave and Launch Indy were on average open later than those around other candidates. The average closing times, respectively, were 9:08 and 9:30 pm. This demonstrates the opportunities available enjoy evenings with friends after work at bowling alleys, casinos, bars and more. While the other locations seem to be comparable in this regard (though slightly behind), it is important to note that for these other three candidates, businesses such as gas stations, convenience stores, liquor stores, and supermarkets appeared twice as frequently. These businesses, which are certainly open later, are not the types of evening entertainment that is desired, though definitely convenient. This accounts for the later than expected average closing times as well as the surprisingly early opening times.