How best can you maximize your value as a Data Scientist?

What are the hottest Cities/states for Data Science?

What are the most common and highest paying skills?

How to maximize your value when seeking a non-commercial organization?

I, like many of you here today, disillusioned and burnt out with my current career, joined the great resignation. It’s not something I did recklessly, I had been contemplating for over a year whether I should move on. As a Systems Administrator I had decent pay and job security. I had good to satisfactory, relationships with my co-workers and supervisors and my commute wasn’t even that bad. However my workload kept increasing, my pay remained the same and training was non-existent. Most importantly, I didn’t feel like I was getting the chance to use my brain, at least in the way I wanted to. Being the status quo for a few years, it shouldn’t be surprising my attention would wander to articles with titles like, “Highest Paying Careers” & “Best Career’s for 2020,” fortunately for me Data Science was always on those lists.

I ultimately took the plunge, and almost six months later here I am close to completing Springboard’s Data Science program. It’s been a hard journey that’s slowly gotten easier, now, I face a new challenge, the dreaded job search. Being such an in demand field, this fork in the road looks more like a bowl of spaghetti. Being a relatively new field, where I should search, how to be the most valuable and how to get the most money, are all daunting tasks, so, like any good Data Scientist, I have used data to solve my problem.

The first question I tackled was, where should I look. I live in Houston, Tx, although it’s a big city, 4th in the US, it’s not known as a hotspot for Data Science. Using a cleaned dataset of over 700 Data Science job postings from Glassdoor I downloaded from Kaggle, most of my initial preconceptions were confirmed. Major cities such as San Francisco, New York and Chicago had the most job postings but not the highest average salaries. That title went to Bellvue Washington, Lake Forest Illinois & Mountain View California. When generalized over the entire state, California, Massachusetts, and New York had the most postings but when analyzing salary, California, Illinois & DC were the top 3.

When comparing salary over job titles, I was surprised that Machine Learning Engineer was ranked higher than Data Scientist, although not by much, followed by Data Engineer. Data Scientist was the most sought after, almost 3 times as many as the next identifiable category, followed by Data Engineer and Data Analyst. I ignored Director as it’s not likely someone new to the field would get a Director level position, however as expected, it was the highest paying title.

Regarding the type of business or sector, Private businesses ranked the highest in postings and salary but I was surprised to find College/University was a very close 3rd in salary, postings were much less however.

Now that we know where to look, we need to look our best! I sorted the top 250 highest paying job postings and focused on what skills were most commonly sought. No surprise that Python was at the top of the list by a healthy margin. Same with SQL which ranked #2, I was a little surprised by excel being number 3 thinking it “beneath” Data Scientists but I was clearly wrong. Spark, aws, hadoop, tensor & tableau were the next 5 most requested skills.

Coming from a Fortune 100 Oil and gas company, I wanted to try something different so I was curious what it would be like to search for a Data Science position outside of public and privately owned organizations. I filtered the data to only return Government, Hospital, Non-profit, Univeristy or School job postings. I found that limiting yourself like this would on average cost you over $26k per year in salary averaging around $78k per year vs. $105k. The states with the most postings became Pennsylvania, Washington and Virginia. While the top 3 most valuable skills remained the same the next most important skills become tableau, aws, pytorch, tensor and bi. It turns out do pay for idealism.

To summarize, in order to maximize our findings we should apply for Data Science or Data Engineer positions in Massachusets, California or Illinois at private or public companies but not any other type of business. Working at a University appears lucrative too but difficult to find as well with the Machine Learning Engineer title. To make ourselves as attractive as possible to seeking companies, we need to be proficient in Python, excel, sql, spark and aws with hadoop, tensor & tableau for additional impact. Following this advice should get you and average 34k more per year in salary.

I hope my findings help you on your Data Science Job search. Never forget you are valuable and you are needed, don’t sell yourself short. Thank you for listening.