Report For Data Analyst Postings on Glassdoor 2019

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Introduction

Data analysts are in high demand across all kinds of industries. More and more companies, all around the world, are becoming increasingly data centered. And with that shift has come a surge in demand for data analysts to help put this data to work. Because there are not enough people to fill these open jobs, many of the organizations trying to recruit data analysts are having a difficult time filling the talent gap.

In this report, I analyze and display key performance indicators that provide insight into Glassdoor's performance in 2019. The data source was from Picklesueat's repository on Github and Kaggle. Picklesueat collected data about job applications for opportunities posted on Glassdoor. This data contains information about the jobs for which people applied, if they submitted their application for the job opening using the agency's easy-apply process, and whether the applicant was ultimately hired.

Following are some questions I'll be answering:
1. For each job title, what percentage of the total applications submitted did they receive?
2. What was the total number of applications received per month?
3. What was the trend in the total number of applications received per month?
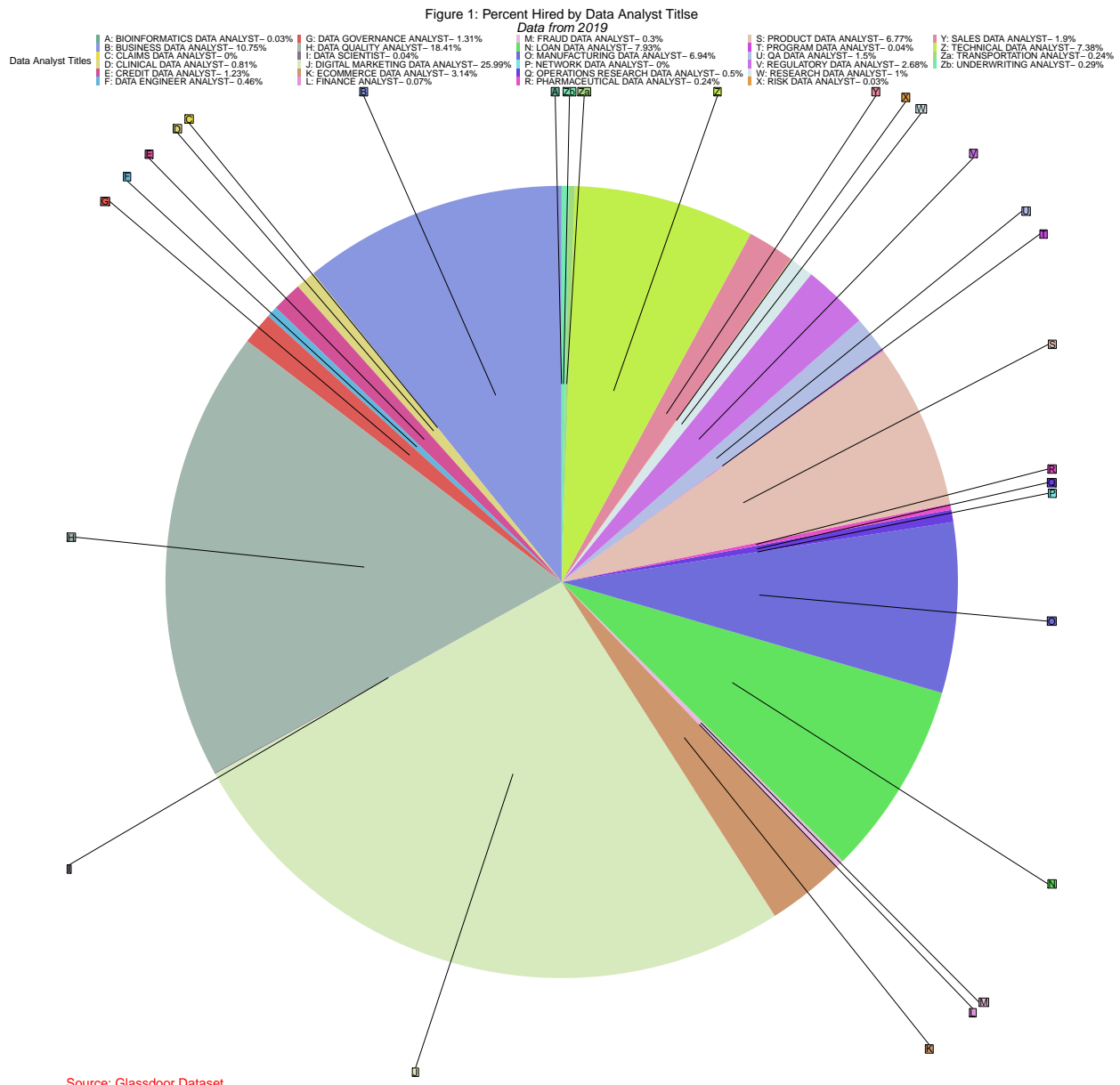
Overview of Data Analyst Positions

Table 1: Percent of Applicants Who Got Hired and Used Easy Apply By Data Analyst Titles

Data Analysts Title	Percent Hired	Percent Easy Apply
BIOINFORMATICS DATA ANALYST	0.03%	0%
BUSINESS DATA ANALYST	10.75%	5.24%
CLAIMS DATA ANALYST	0%	0.09%
CLINICAL DATA ANALYST	0.81%	0.3%
CREDIT DATA ANALYST	1.23%	0%
DATA ENGINEER ANALYST	0.46%	0%
DATA GOVERNANCE ANALYST	1.31%	0.36%
DATA QUALITY ANALYST	18.41%	54.74%
DATA SCIENTIST	0.04%	0.19%
DIGITAL MARKETING DATA ANALYST	25.99%	0.02%
ECOMMERCE DATA ANALYST	3.14%	7.81%
FINANCE ANALYST	0.07%	0.06%
FRAUD DATA ANALYST	0.3%	0.54%
LOAN DATA ANALYST	7.93%	0.04%
MANUFACTURING DATA ANALYST	6.94%	12.81%
NETWORK DATA ANALYST	0%	0%
OPERATIONS RESEARCH DATA ANALYST	0.5%	3%
PHARMACEUTICAL DATA ANALYST	0.24%	0.07%
PRODUCT DATA ANALYST	6.77%	0.77%

Data Analysts Title	Percent Hired	Percent Easy Apply
PROGRAM DATA ANALYST	0.04%	0.28%
QA DATA ANALYST	1.5%	0.39%
REGULATORY DATA ANALYST	2.68%	0.02%
RESEARCH DATA ANALYST	1%	0.37%
RISK DATA ANALYST	0.03%	0.06%
SALES DATA ANALYST	1.9%	0.09%
TECHNICAL DATA ANALYST	7.38%	12.75%
TRANSPORTATION ANALYST	0.24%	0%
UNDERWRITING ANALYST	0.29%	0%

From the Table 1, you can see that the percentage of digital marketing applications resulting in a hire was 25.99% of total applications selected for hire. Also, the percentage of manufacturing applications submitted using easy apply was 12.81% of total applications submitted using the process. According to the data, it also seems that digital marketing applications resulted in a hire about three times more often than loan data analyst applications.

Visualization of Data Analyst Applications Represented by the Most Hires

Figure 1: Percent Hired by Data Analyst Titlse

Data from 2019

Data Analyst Titles

A: BIOINFORMATICS DATA ANALYST– 0.03%
B: BUSINESS DATA ANALYST– 10.75%
C: CLAIMS DATA ANALYST– 0%
D: CLINICAL DATA ANALYST– 0.81%
E: CREDIT DATA ANALYST– 1.23%
F: DATA ENGINEER ANALYST– 0.46%

G: DATA GOVERNANCE ANALYST– 1.31%
H: DATA QUALITY ANALYST– 18.41%
I: DATA SCIENTIST– 0.04%
J: DIGITAL MARKETING DATA ANALYST– 25.99%
K: ECOMMERCE DATA ANALYST– 3.14%
L: FINANCE ANALYST– 0.07%

M: FRAUD DATA ANALYST– 0.3%
N: LOAN DATA ANALYST– 7.93%
O: MANUFACTURING DATA ANALYST– 6.94%
P: NETWORK DATA ANALYST– 0%
Q: OPERATIONS RESEARCH DATA ANALYST– 0.5%
R: PHARMACEUTICAL DATA ANALYST– 0.24%

S: PRODUCT DATA ANALYST– 6.77%
T: PROGRAM DATA ANALYST– 0.04%
U: QA DATA ANALYST– 1.5%
V: REGULATORY DATA ANALYST– 2.68%
W: RESEARCH DATA ANALYST– 1%
X: RISK DATA ANALYST– 0.03%

Y: SALES DATA ANALYST– 1.9%
Z: TECHNICAL DATA ANALYST– 7.38%
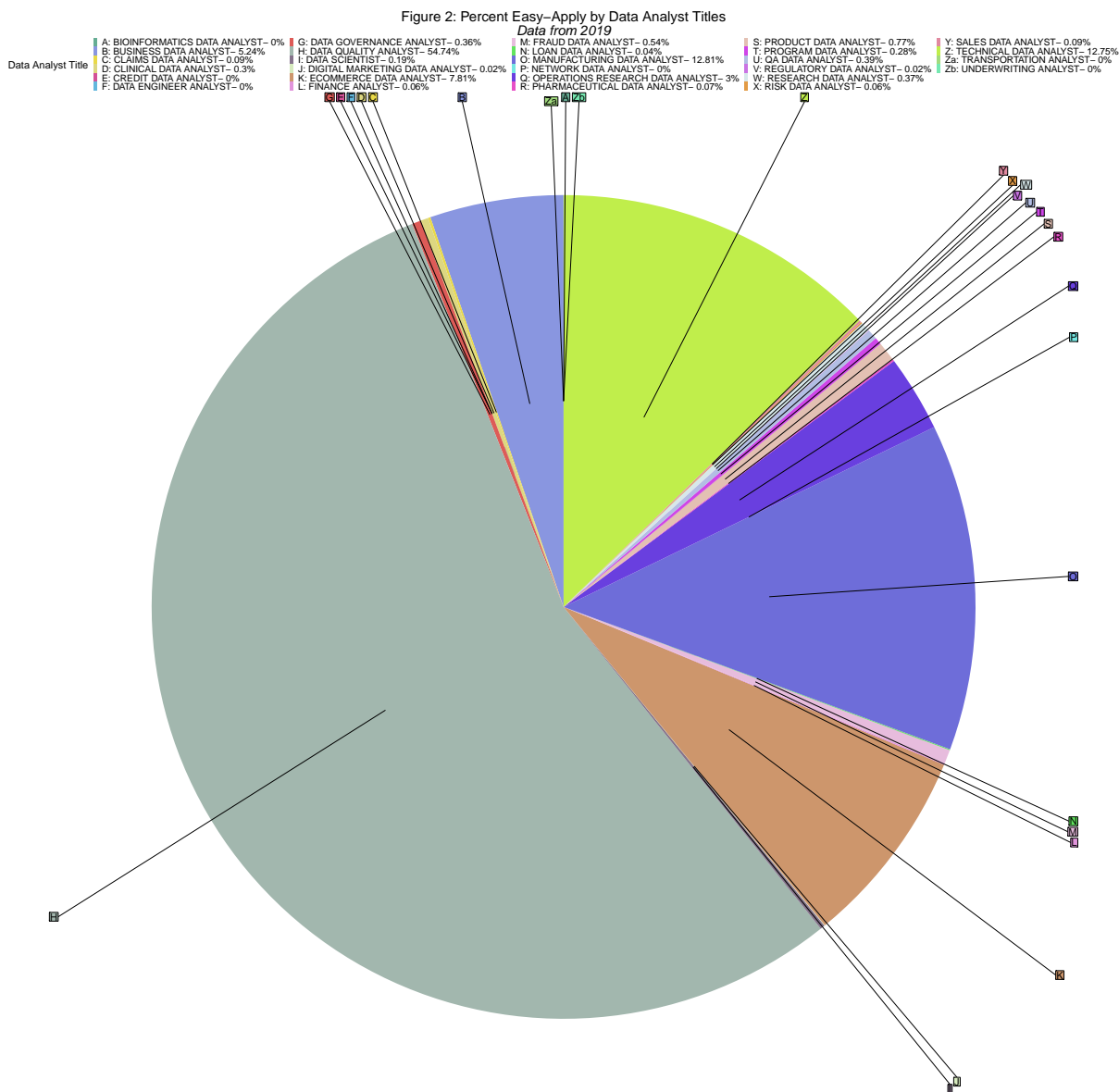Za: TRANSPORTATION ANALYST– 0.24%
Zb: UNDERWRITING ANALYST– 0.29%

Source: Glassdoor Dataset

From Figure 1, you can see that digital marketing applications represents the largest portion of total hires at 26.0% while applications for data quality analyst represents the second largest portion at 18.4%. All other applications represent less than 12% of total hires.

Visualization of Data Analyst Applications Represented by the Most Easy-Apply Submissions

Figure 2: Percent Easy–Apply by Data Analyst Titles

Data from 2019

Data Analyst Title

A: BIOINFORMATICS DATA ANALYST– 0%
B: BUSINESS DATA ANALYST– 5.24%
C: CLAIMS DATA ANALYST– 0.09%
D: CLINICAL DATA ANALYST– 0.3%
E: CREDIT DATA ANALYST– 0%
F: DATA ENGINEER ANALYST– 0%

G: DATA GOVERNANCE ANALYST– 0.36%
H: DATA QUALITY ANALYST– 54.74%
I: DATA SCIENTIST– 0.19%
J: DIGITAL MARKETING DATA ANALYST– 0.02%
K: ECOMMERCE DATA ANALYST– 7.81%
L: FINANCE ANALYST– 0.06%

M: FRAUD DATA ANALYST– 0.54%
N: LOAN DATA ANALYST– 0.04%
O: MANUFACTURING DATA ANALYST– 12.81%
P: NETWORK DATA ANALYST– 0%
Q: OPERATIONS RESEARCH DATA ANALYST– 3%
R: PHARMACEUTICAL DATA ANALYST– 0.07%

S: PRODUCT DATA ANALYST– 0.77%
T: PROGRAM DATA ANALYST– 0.28%
U: QA DATA ANALYST– 0.39%
V: REGULATORY DATA ANALYST– 0.02%
W: RESEARCH DATA ANALYST– 0.37%
X: RISK DATA ANALYST– 0.06%

Y: SALES DATA ANALYST– 0.09%
Z: TECHNICAL DATA ANALYST– 12.75%
Za: TRANSPORTATION ANALYST– 0%
Zb: UNDERWRITING ANALYST– 0%

As you can see from Figure 2, data quality analyst applications make up the largest portion of all easy-apply submissions compared to all the other job titles at 54.7%. Data quality analyst is followed by manufacturing data analyst at 12.81% and technical data analyst at 12.75% respectively.

Overview of Total Number of Applications Received per Month in 2019

Table 2: Total Number of Applicants by Month

Month	Applicants
January	2387
February	2312
March	2536

Month	Applicants
April	2544
May	2954
June	2990
July	3138
August	2969
September	2865
October	2751
November	2508
December	2642
Total	32596

Table 3: Summary of Total Number of Applicants by Month

	Min	Max	Average
Month	February	July	NA
Monthly Applicants	2312	3138	2716

From both Table 2 and Table 3, you can see that the least number of applications received was 2,312 in February, the greatest was 3,138 in July, and the average for 2019 was 2,716 per month.

Visualization of Changes in Applications Received Over 2019

Figure 3: Total Data Analysts Applicants by Month

Data from 2019
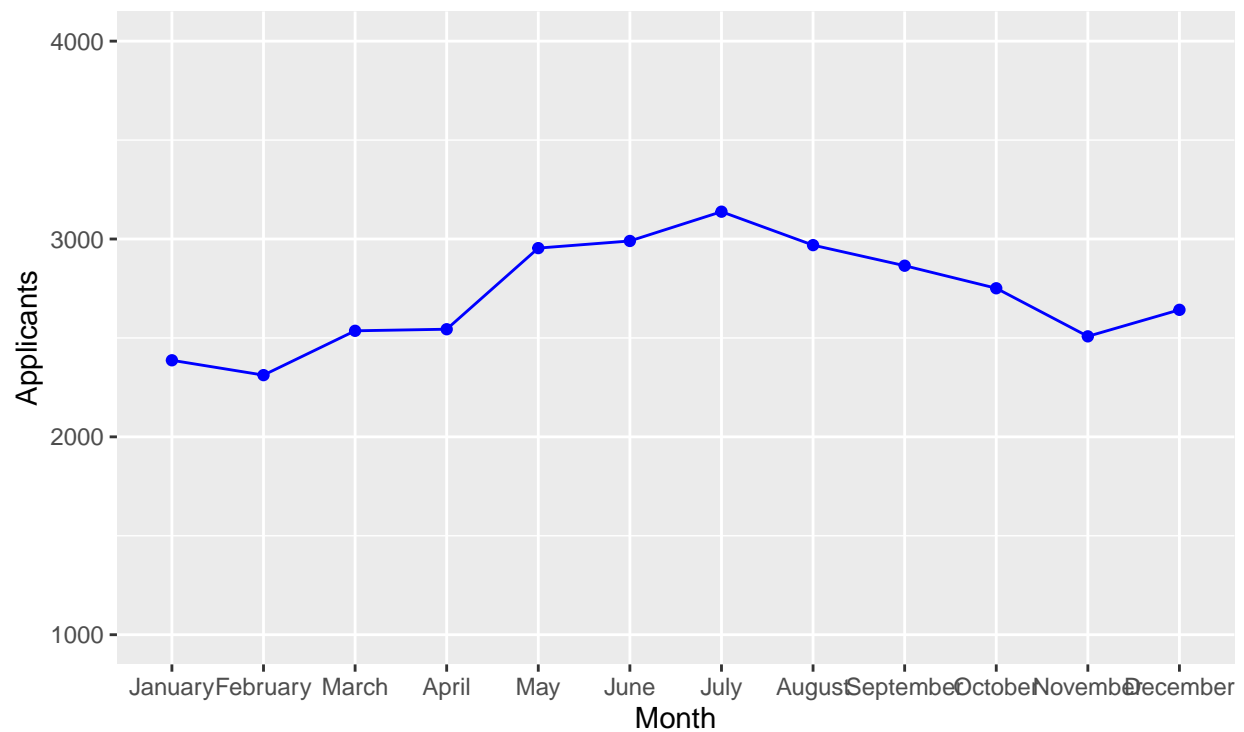
Source: Glassdoor Dataset

According to Figure 3, it appears that, in general, applications received increased from February to July, then decreased from July to November. This implies that applications are sent on a seasonal basis and that applicants are more active during the Summer. Regardless, of these discrepancies though, applications do remain steady year-round.

Conclusion

Overall, this report communicates important aspects of Glassdoor's recruitment experiences in 2019. The report uses job application data from 2019 to analyze and display key metrics, such as what percentage of applications were submitted for each job title, the total number of applications received per month, and the trend in the total number of applications received per month.This information will help discover patterns, trends, and insights that will lead to smart decisions in the future. The subsequent recommendations made from this data will help Glassdoor fill vacancies for data analytics jobs, enabling more businesses to hire talented data analytics professionals and become truly data-driven.