



## Case Study:

## Analyzing Job Market Data in Power BI

Exploring a real-world job posting dataset to uncover insights for a fictional recruitment company called DataSearch

Dashboard by Marco Stallmann (2022)

### Applied skills:

- investigate and clean CSV-data to find out what skills are most in-demand for data scientists, data analysts, and data engineers (Power Query)
- use DAX formulas to calculate measures and build insightful visualizations
- create a business dashboard to answer questions for the DataSearch team

Jobs



Skills



Company



## Jobs Overview

9556

Posting Count

4,49

Average Years Experience



Home

Job Title

All

Job Position Level

All

Company Name

All

Company Size

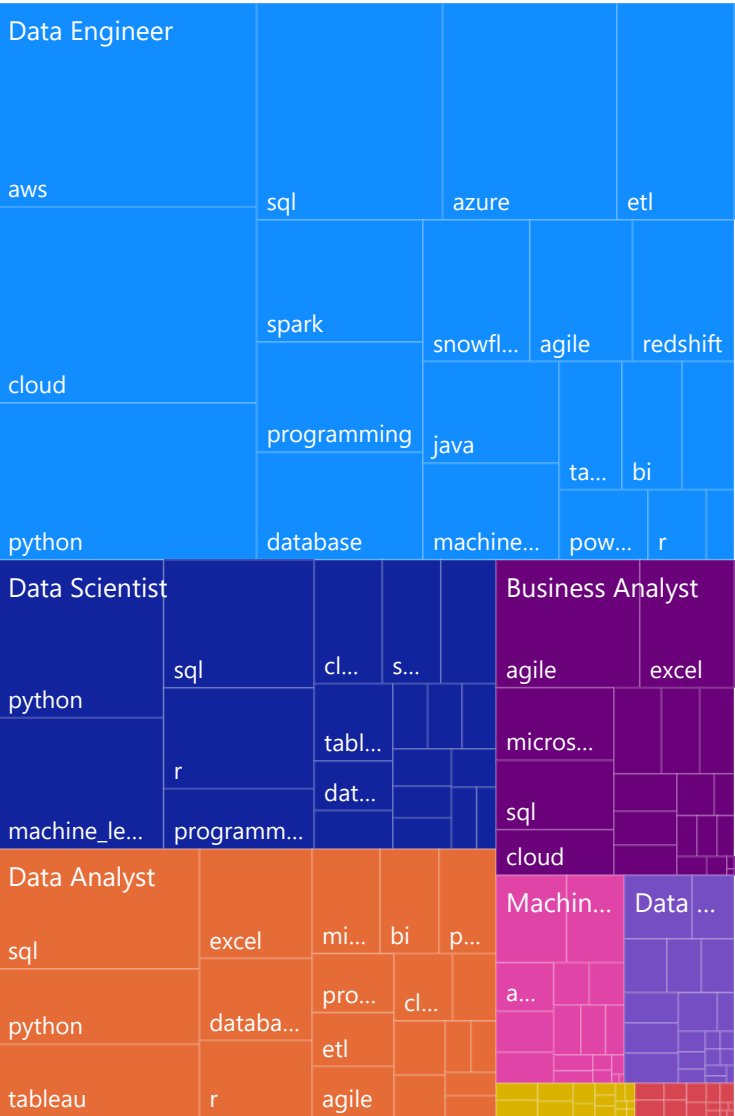
All

Company Industry

All

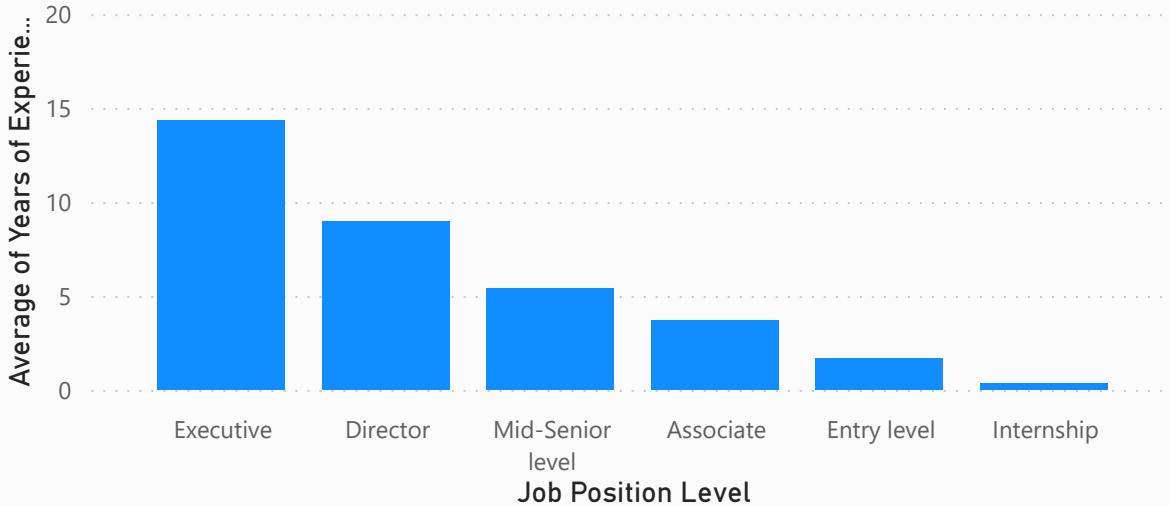
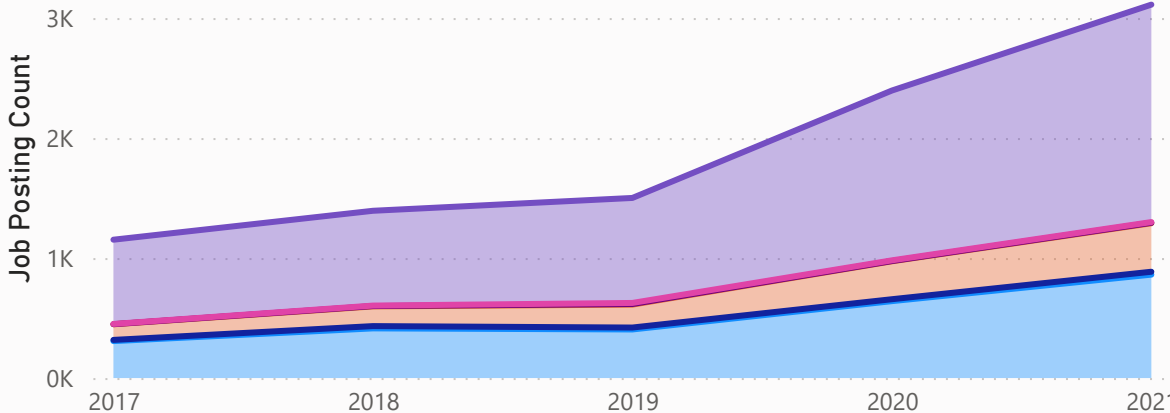
Job Posting Date

01.01.2017 31.12.2021



Job Position Level

Associate Director Entry level Executive Internship Mid-Senior l...



skills Overview

166  
Distinct Count of Skills

8561  
Job Postings with Skills



Job Title

All

Job Position Level

All

Company Name

All

Company Size

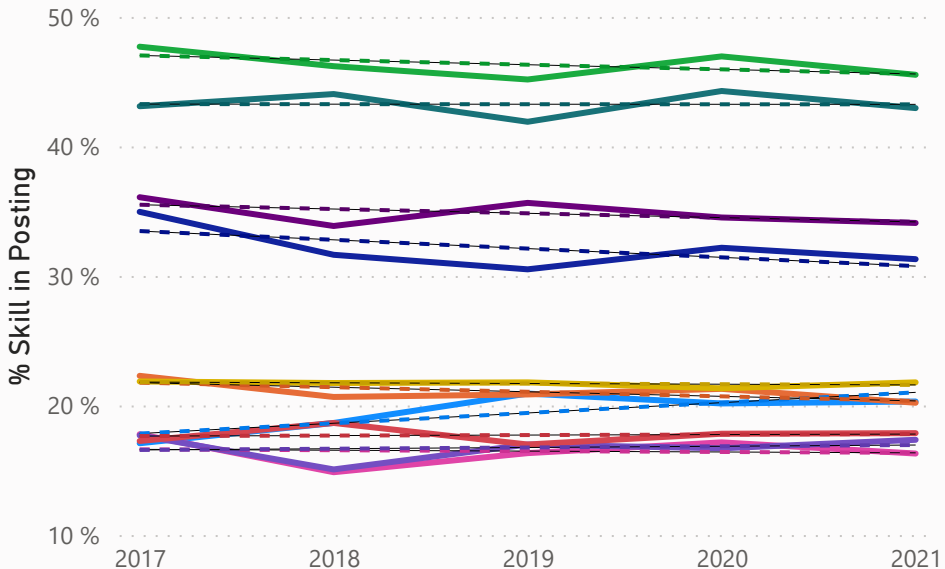
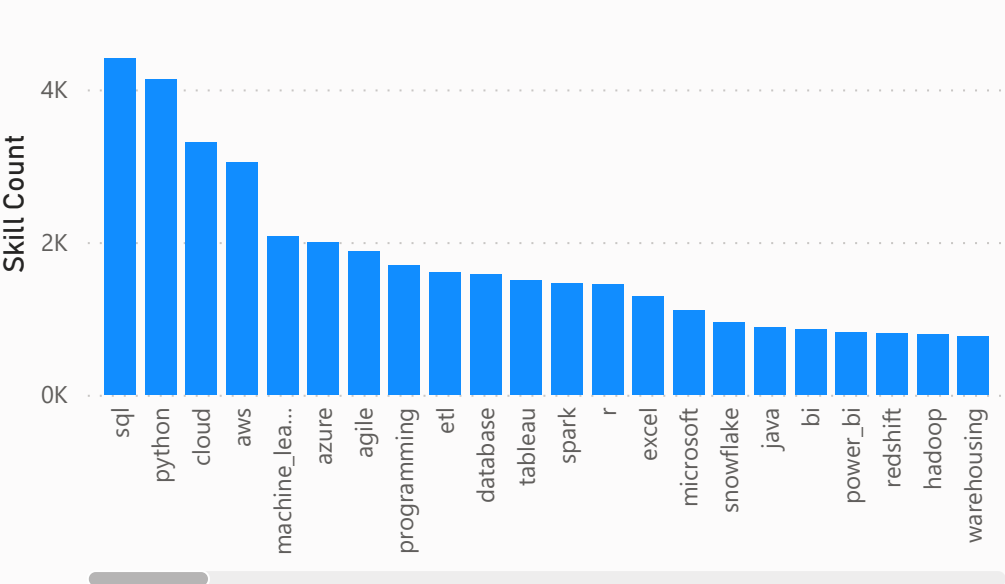
All

Company Industry

All

Job Posting Date

01.01.2017 31.12.2021



Percentage a Skill Included in Job Posting

Job Skills	Business Analyst	Data Analyst	Data Architect	Data Engineer	Data Science Manager	Data Scientist	Machine Learning Engineer	Research Scientist
sql	18,27 %	73,13 %	90,23 %	52,40 %	73,91 %	43,37 %	21,55 %	10,00 %
python	4,78 %	45,99 %	36,74 %	52,66 %	95,65 %	58,83 %	80,21 %	40,00 %
cloud	12,00 %	11,92 %	47,91 %	65,86 %	21,74 %	18,96 %	37,46 %	25,00 %
aws	1,84 %	6,46 %	38,60 %	68,46 %	73,91 %	15,41 %	44,52 %	12,50 %
machine_learning	1,54 %	8,42 %	7,91 %	17,07 %	95,65 %	48,87 %	97,88 %	38,75 %
azure	1,84 %	3,91 %	11,63 %	49,10 %	8,70 %	6,80 %	9,89 %	13,75 %
agile	41,11 %	12,53 %	34,42 %	18,89 %		5,00 %	14,84 %	5,00 %
programming	3,48 %	14,61 %	31,63 %	23,83 %	56,52 %	20,41 %	23,67 %	36,25 %
etl	1,84 %	13,33 %	55,81 %	32,96 %	4,35 %	5,05 %	3,89 %	

Company Overview

Average Pay

\$100,96K

\$116K

\$131,59K



Home

Job Title

All

Job Position Level

All

Company Name

All

Company Size

All

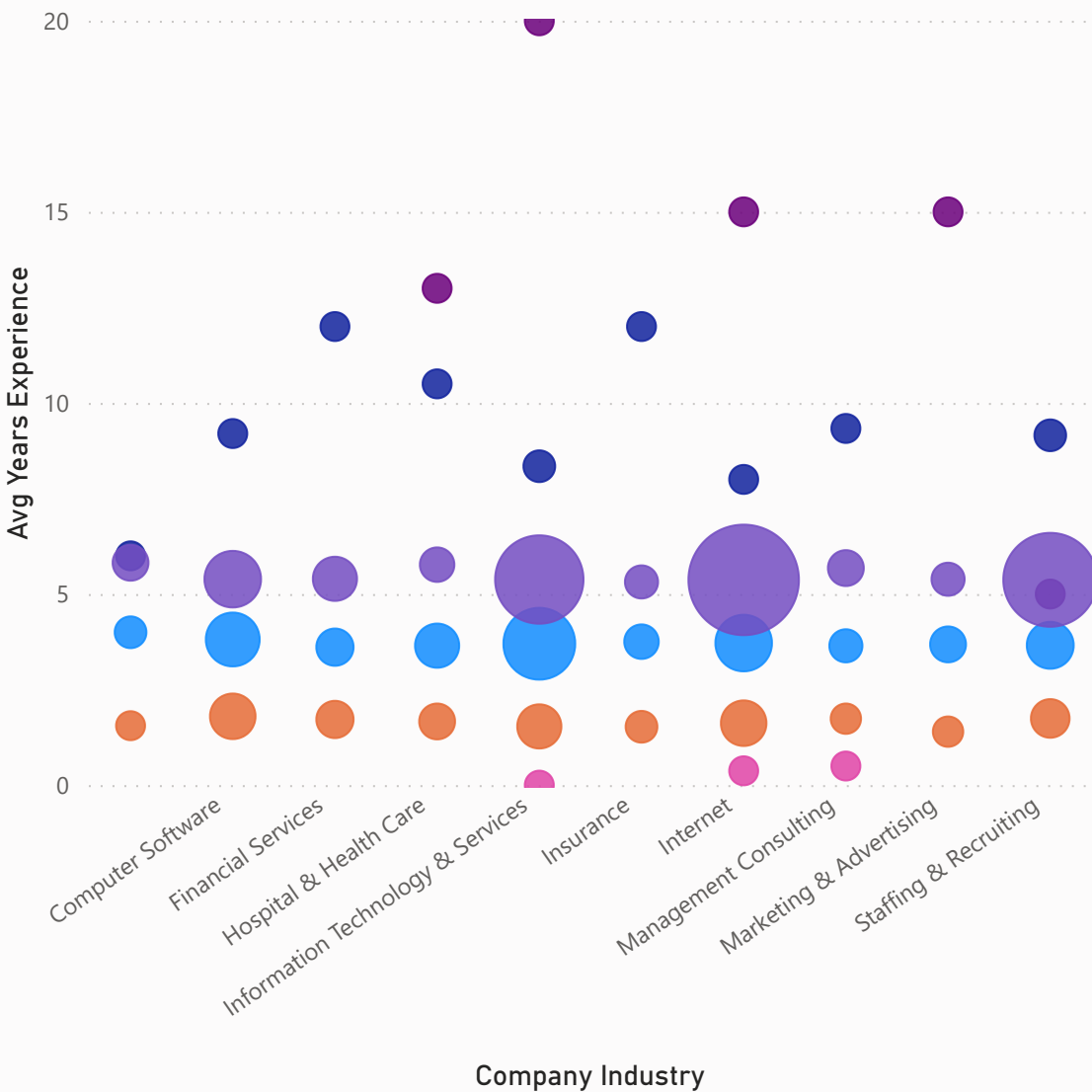
Company Industry

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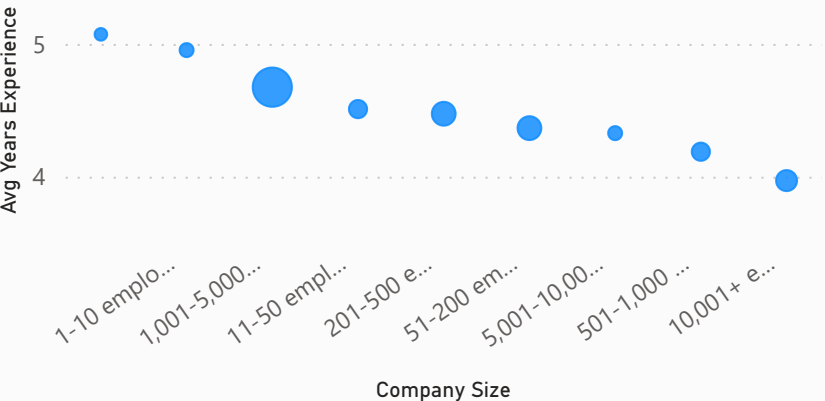
Job Posting Date

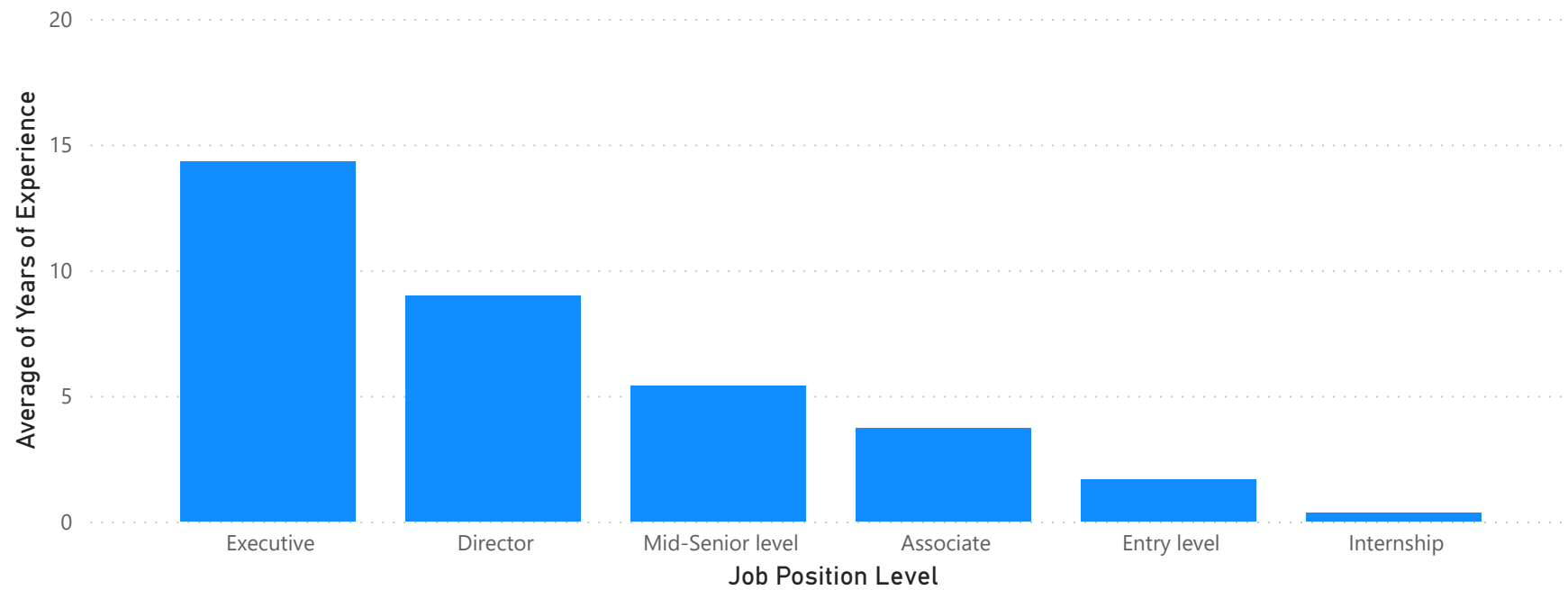
01.01.2017

31.12.2021

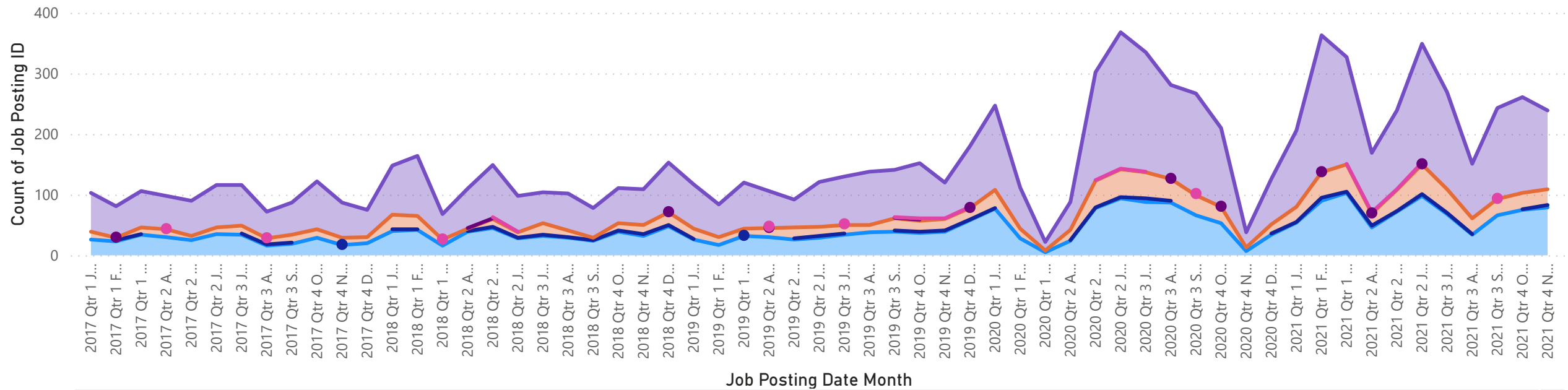


Job Title	Company Name	Posting Count
Data Engineer	Toptal	994
Data Scientist	Toptal	673
Business Analyst	Perficient	220
Data Engineer	Jobot	183
Data Architect	Perficient	149
Data Engineer	Recruiting from Scratch	120
Business Analyst	Dice	103
Data Scientist	Jobot	97
Data Engineer	Dice	89
Data Analyst	Perficient	50
Business Analyst	Zscaler	44
Business Analyst	Jobot	43
Data Analyst	Kraken Digital Asset Exchange	43

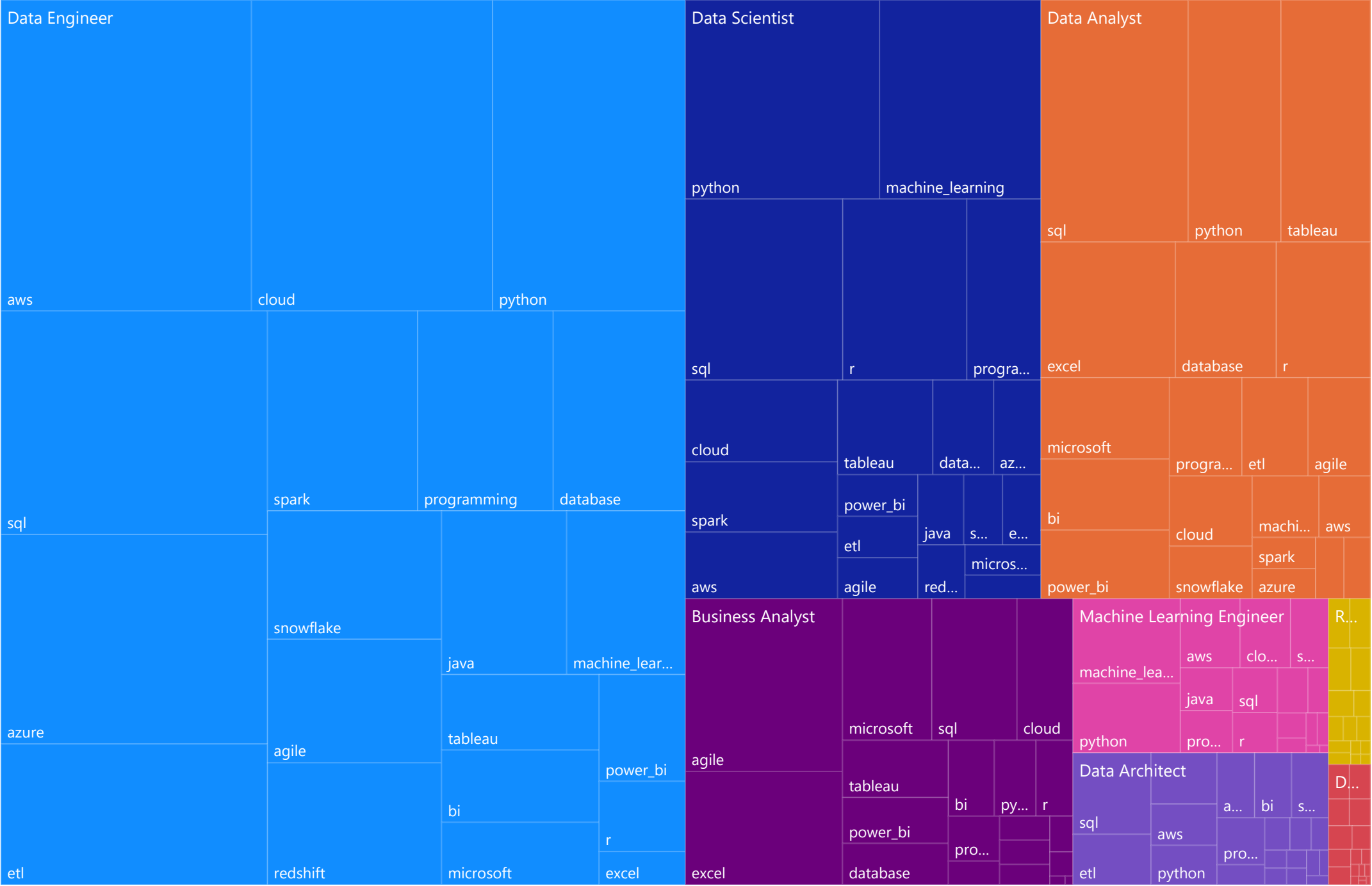




Job Position Level ● Associate ● Director ● Entry level ● Executive ● Internship ● Mid-Senior level



Job Skills by Job Title



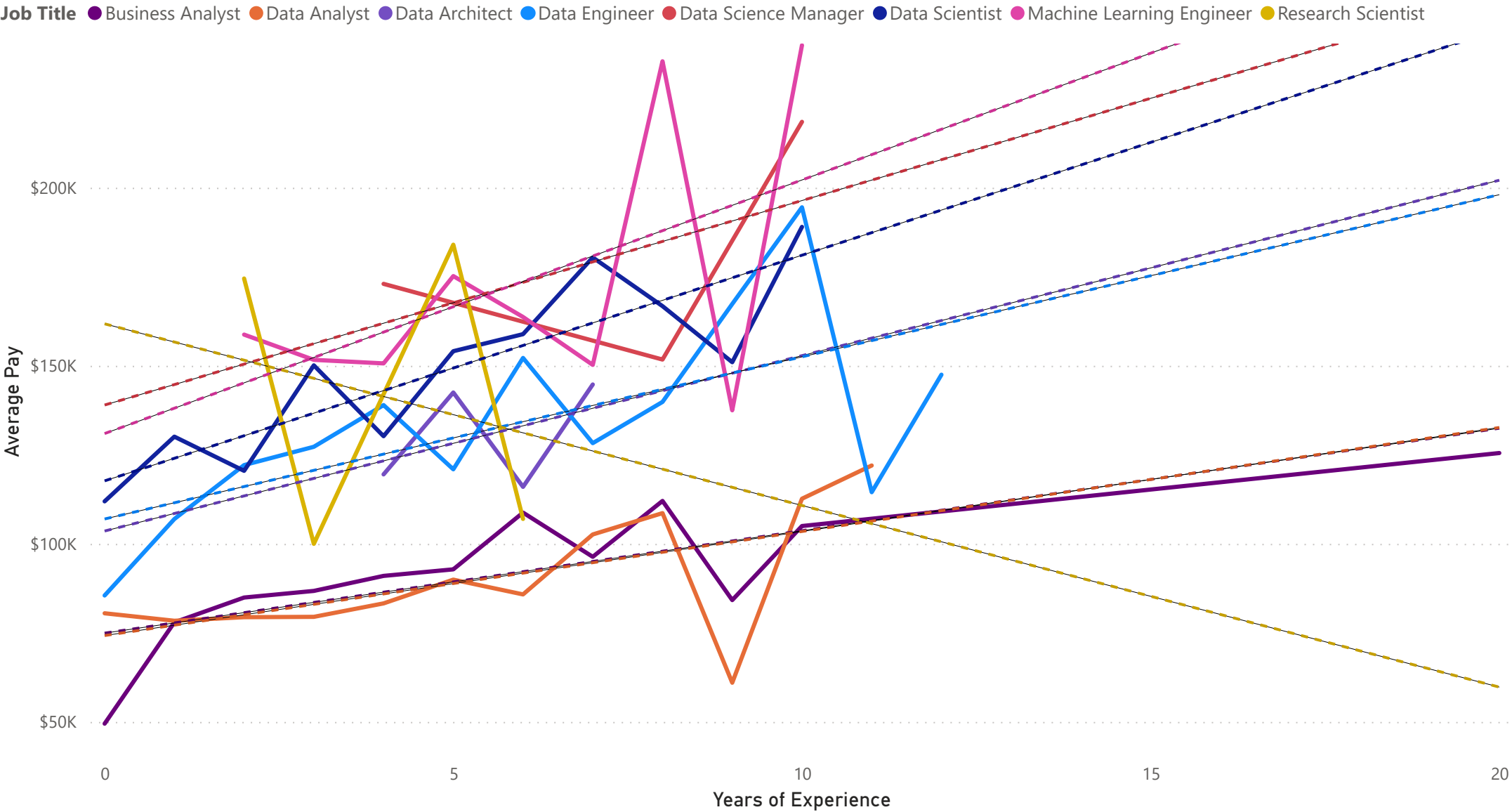
Job Title

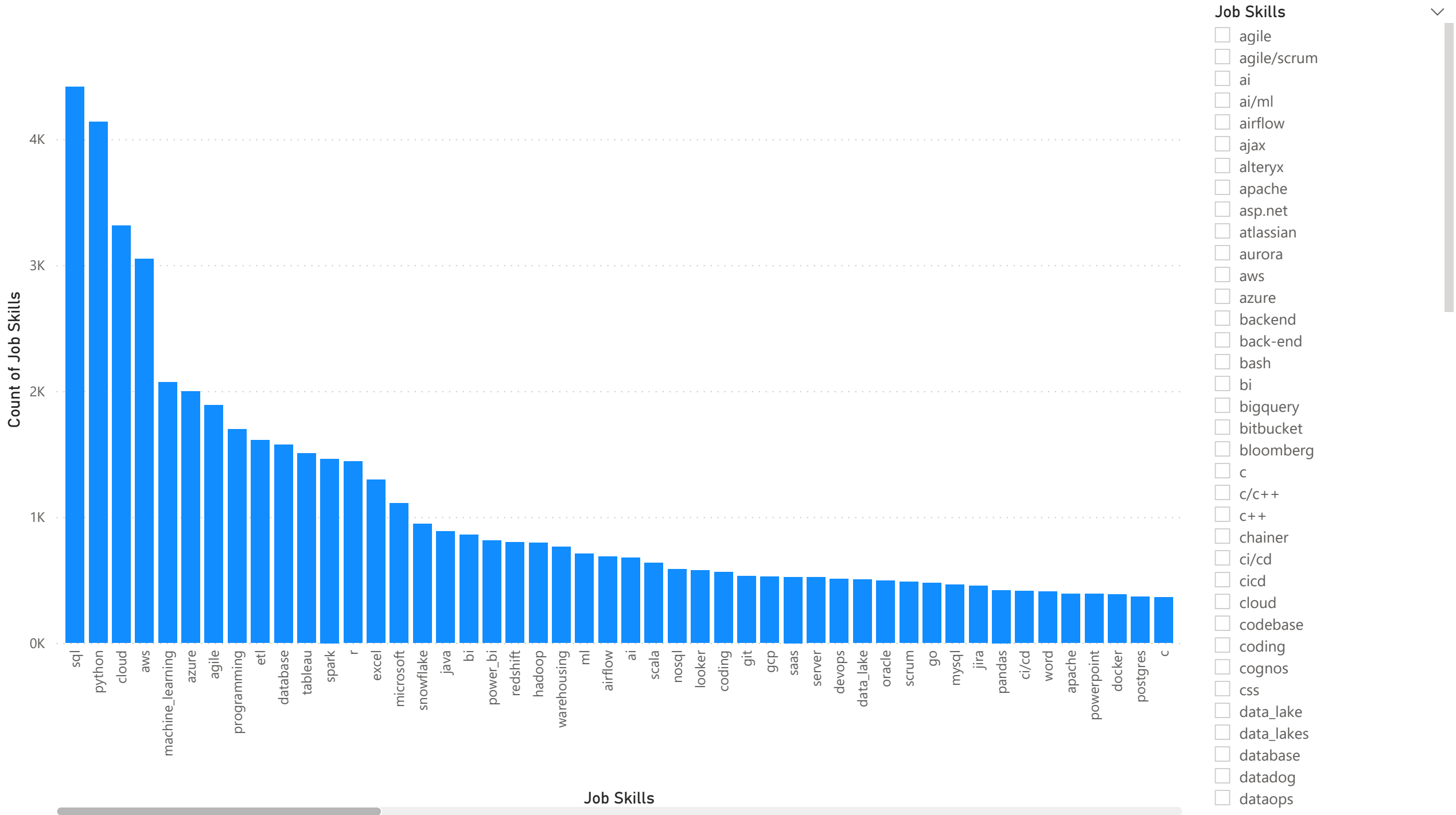
- ☐ Business Analyst
- ☐ Data Analyst
- ☐ Data Architect
- ☐ Data Engineer
- ☐ Data Science Manager
- ☐ Data Scientist
- ☐ Machine Learning Engin...
- ☐ Research Scientist

Job Skills

- 
- ☐ agile
  - ☐ agile/scrum
  - ☐ ai
  - ☐ ai/ml
  - ☐ airflow
  - ☐ ajax
  - ☐ alteryx
  - ☐ apache
  - ☐ asp.net
  - ☐ atlassian
  - ☐ aurora
  - ☐ aws
  - ☐ azure
  - ☐ backend
  - ☐ back-end
  - ☐ bash
  - ☐ ...

Average salaries of Data experts by years of experience (with trend)

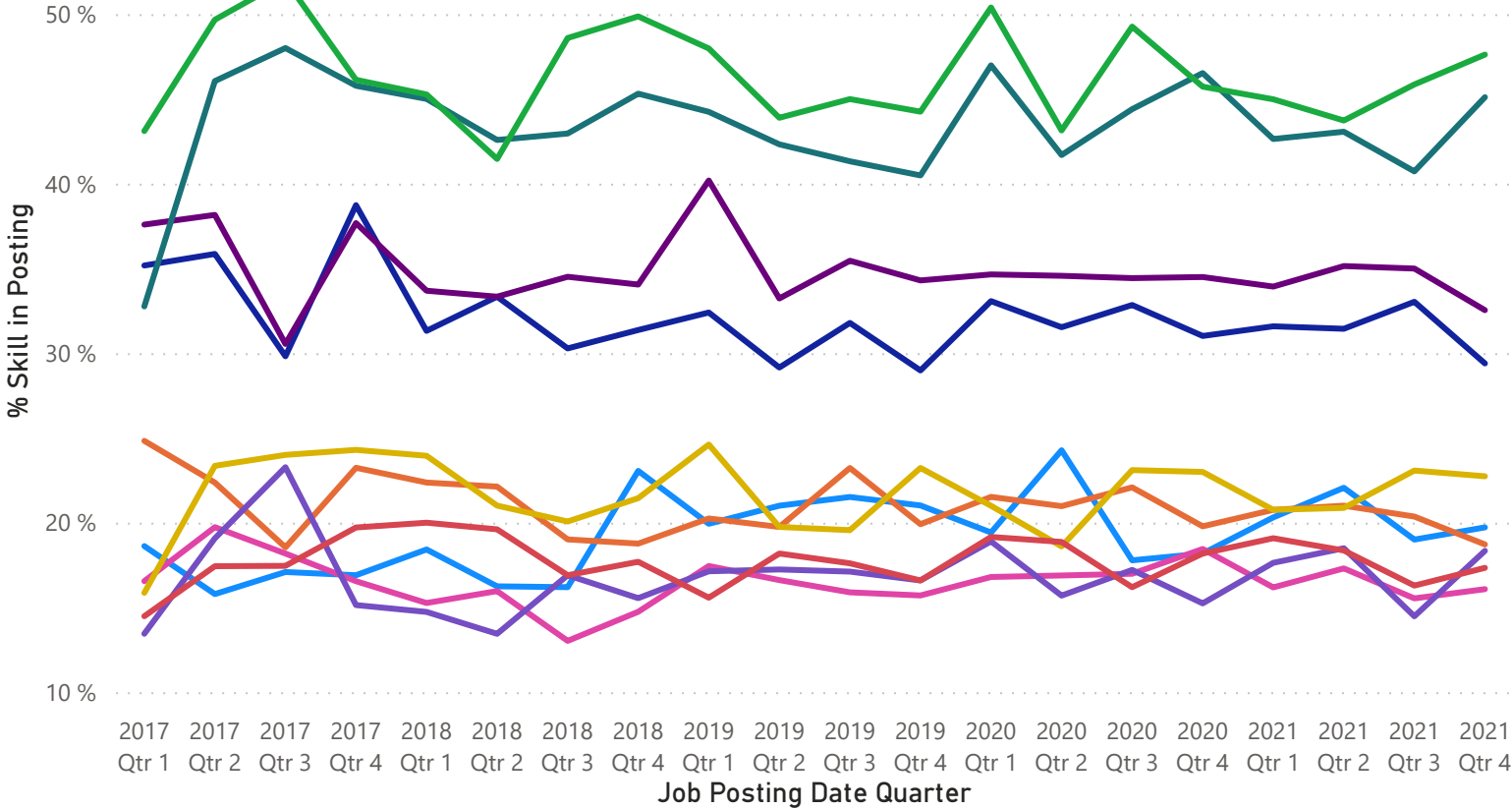






Likelihood of skills in Job Postings

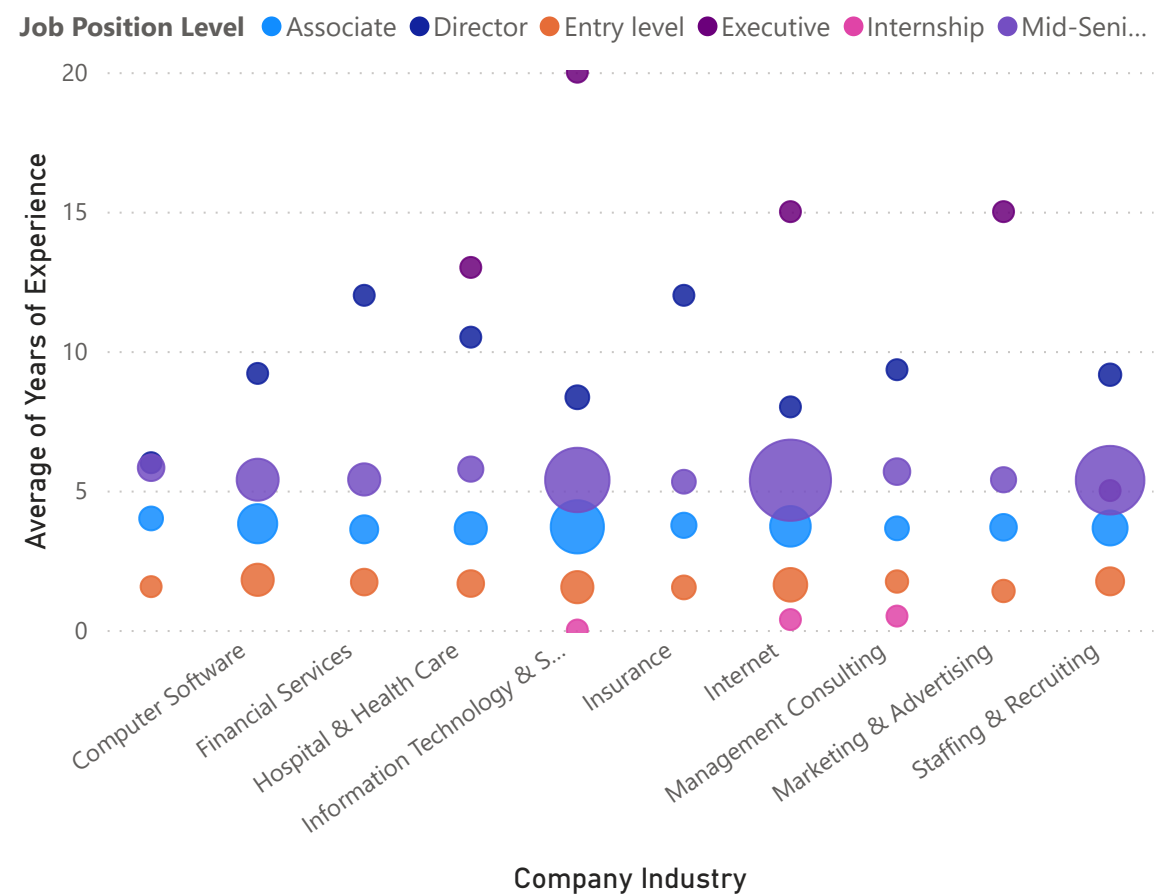
Job Skills agile aws azure cloud database etl machine\_learning programming python sql



- Job Title
- ☐ Business Analyst
  - ☐ Data Analyst
  - ☐ Data Architect
  - ☐ Data Engineer
  - ☐ Data Science Manager
  - ☐ Data Scientist
  - ☐ Machine Learning Engineer

- Job Skills
- ☐ agile
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programming	3,48 %	14,61 %	31,63 %	
etl	1,84 %	13,33 %	55,81 %	
database	6,62 %	28,01 %	13,49 %	
tableau	9,16 %	44,31 %	9,77 %	
spark	0,20 %	4,04 %	33,95 %	
r	4,23 %	26,13 %	2,79 %	
excel	26,98 %	37,37 %	3,26 %	
microsoft	19,16 %	21,48 %	4,65 %	
snowflake	0,85 %	8,89 %	5,12 %	
java	1,24 %	3,30 %	4,65 %	
bi	5,28 %	18,72 %	33,95 %	
power_bi	7,37 %	18,05 %	5,58 %	
redshift	0,10 %	3,57 %	5,12 %	
hadoop	0,30 %	8,08 %	9,77 %	
warehousing	1,44 %	5,25 %	6,98 %	
ml	0,40 %	0,61 %	3,26 %	
airflow		2,63 %	28,37 %	
ai	3,09 %	4,11 %	3,26 %	
scala	0,15 %	2,76 %	1,86 %	
nosql	0,15 %	2,42 %	34,88 %	
looker	1,14 %	18,65 %	0,47 %	
coding	1,94 %	4,58 %	1,86 %	
git	1,10 %	3,23 %	27,91 %	
gcp	0,15 %	1,68 %	2,33 %	
saas	5,38 %	8,62 %	2,79 %	
server	2,64 %	5,66 %	4,19 %	
devops	1,89 %	0,94 %	33,02 %	
data_lake	0,20 %	4,38 %	47,44 %	
<	1,22 %	2,76 %	5,12 %	>



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