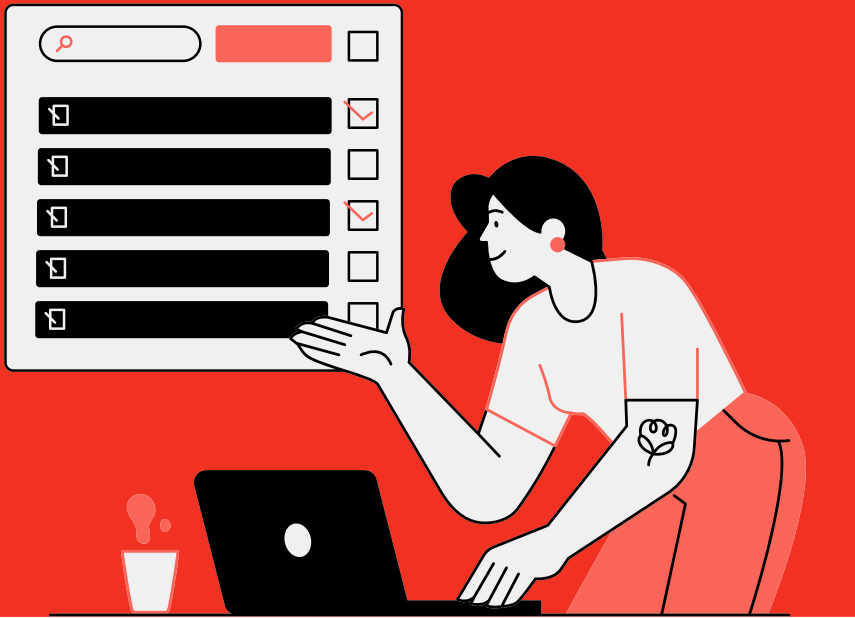# Navigating the Dynamic Data Job Market of Today

Michael Fasching

OVERVIEW

- In-depth analysis of job market trends for data experts in Washington State, New York State, and California.
- Valuable insights on job opportunities, skill requirements, and salary ranges.
- Visualizations revealing distribution of job postings, popular roles, competitiveness, and office schedule options.
- Key findings to empower informed decision-making in career development.

DATASOURCE - PROCESS

- LinkedIn was chosen as the primary data source
- A Python script was used to automate scraping data from LinkedIn job postings.
- The script collected information such as job titles, locations, URLs, number of applicants, job descriptions, and days online.
- The collected data underwent a cleaning and preprocessing phase to ensure data quality and consistency

Link to GitHub Repository

KEY FINDINGS

Link to detailed dashboard here!!

Office Schedule — Type Set
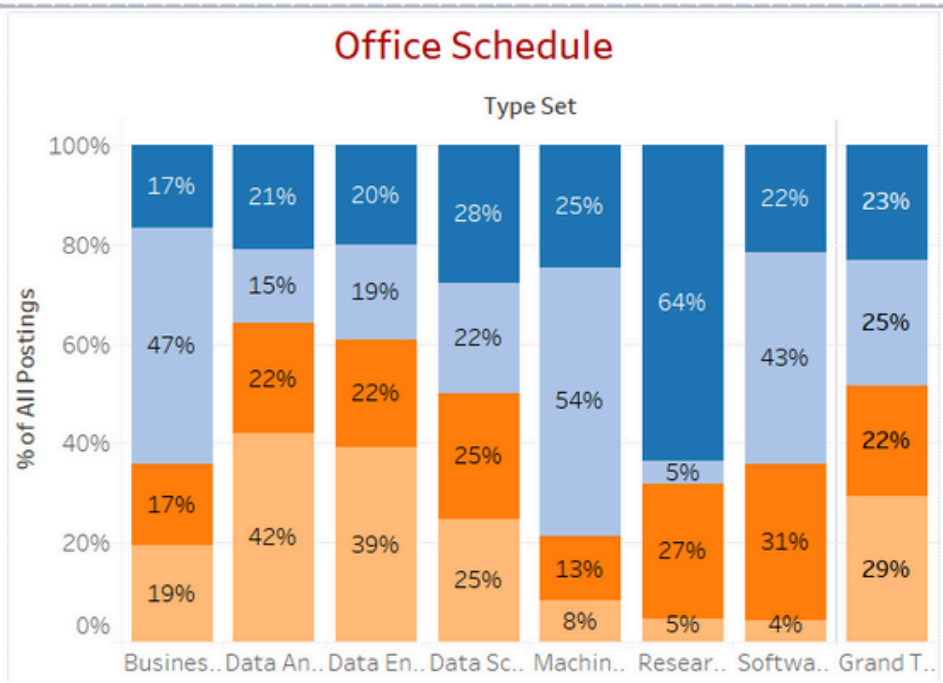
OFFICE SCHEDULE OPTIONS:

- 64% of **Data Analyst** job postings offer a remote or hybrid schedule.
- 54% of **machine learning job** postings do not specify whether the job is offered in a hybrid or remote format.
- **New York** has the highest percentage of hybrid and remote positions overall, accounting for 52% of all roles.
- **Washington** and **California** explicitly promote 33% of all roles as hybrid or remote.

ROLE DISTRIBUTION BY STATE

- **New York:** Data Analysts, Data Engineers, and Data Scientists make up 91% of the data job market.
- **California**: Machine Learning positions account for 20% of the data job market.
- **Washington** State: Business Intelligence, Data Analysts, Data Engineers, Data Scientists, and Machine Learning Engineers are distributed as 14%, 20%, 14%, 15%, and 16%.
- The distribution of data job roles varies across New York, California, and Washington State.

Distribution of Roles

SALARY RANGE
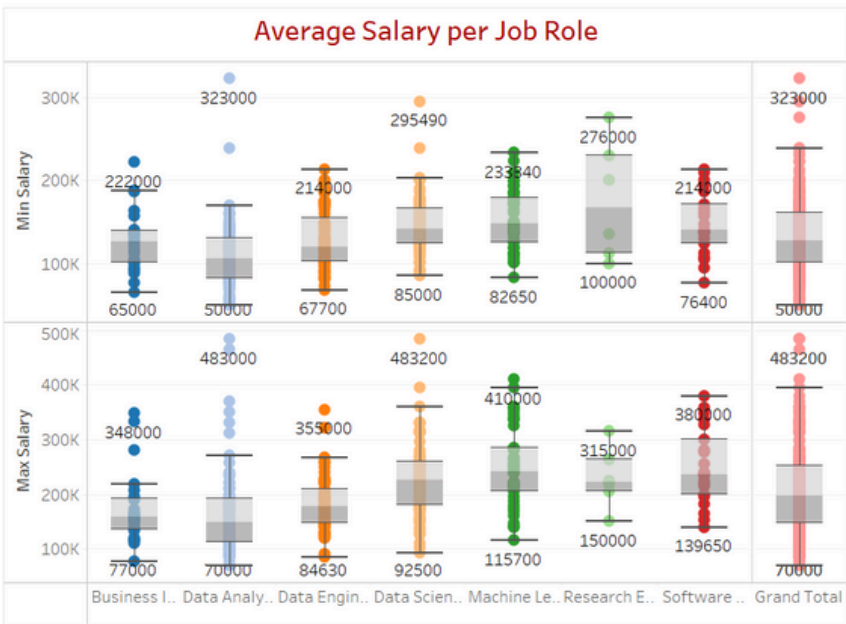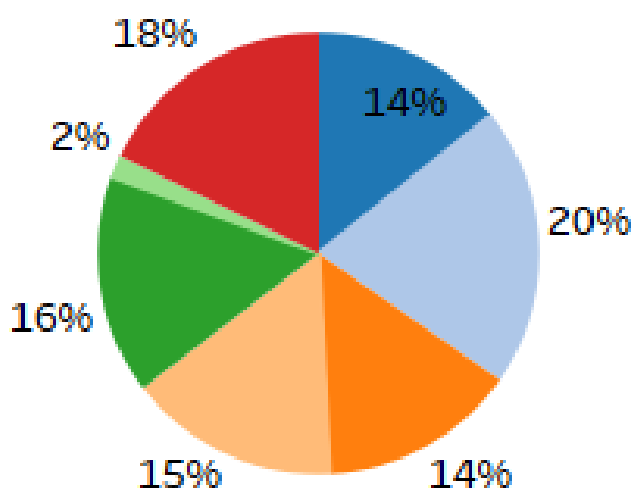
Average Salary per Job Role

- California has the highest median minimum salary across all data job roles, with a value of $142,000.
- Washington State follows with the second-highest median minimum salary at $129,000.
- California also offers the highest median maximum salary across all data job roles, with a value of $218,450.
- Washington State ranks second with a median maximum salary of $210,050, followed by New York with $171,000.

COMPETITIVENESS - APPLICANTS PER POSITION

- New York has the highest percentage (62%) of job postings with more than 100 applicants
- Washington has the lowest percentage (40%) of job postings with more than 100 applicants, indicating a relatively less competitive job market compared to California (66%) and New York (62%) specifically for Data Analyst, Data Scientist, and Data Engineer positions.

More Than 100 applicants

Type Set	
Business Intelligence	~41%
Data Analyst	~81%
Data Engineer	~73%
Data Scientist	~60%
Machine Learning E..	~42%
Research Engineer	~55%
Software Developer	~25%
Avg. Total	~63%