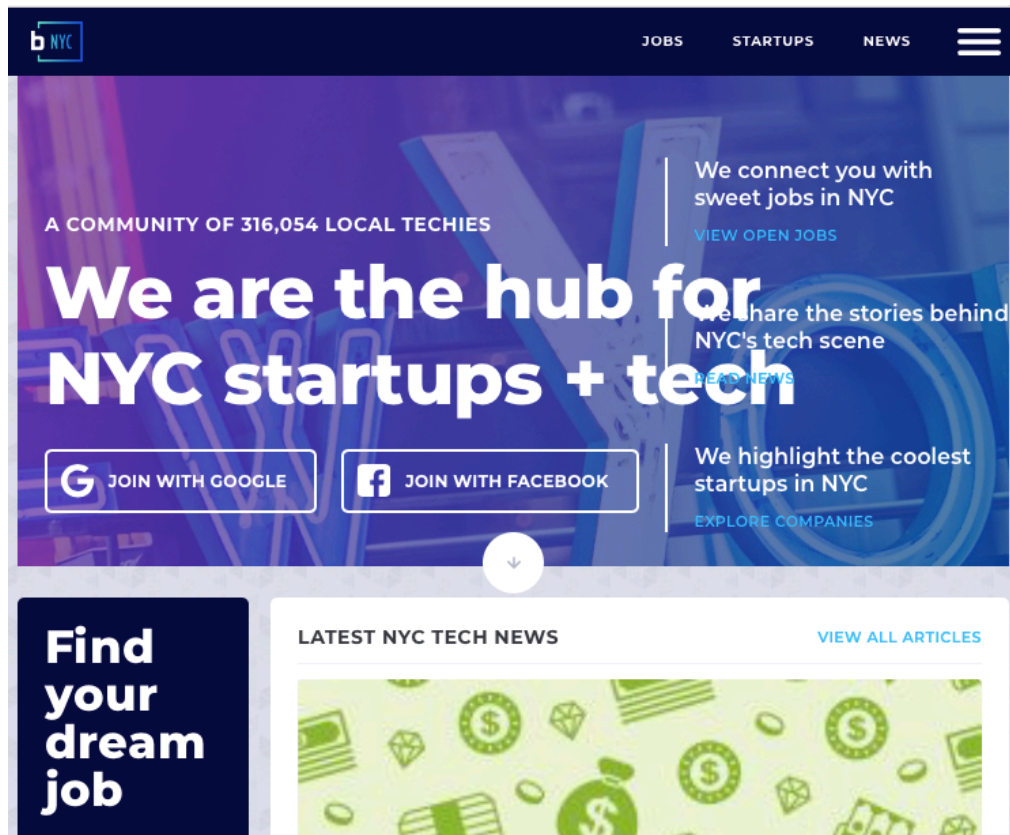

INDUSTRY SECTOR TRENDS IN NYC START-UPS

BASED ON DATA FROM [BUILTINNYC.COM](https://builtinny.com)





- Builtinnyc.com has listings for almost 3,500 NYC start-ups and tech companies.
- New industry trends and technologies often first tested out in start-up community

Goal: determine employment trends in the top tech sectors to help —

- Job seekers
- Venture capital investors
- Start-up companies looking to hire

Click link to access
info on individual
companies



Scroll down for more

Listing of 20 companies per page



250 pages



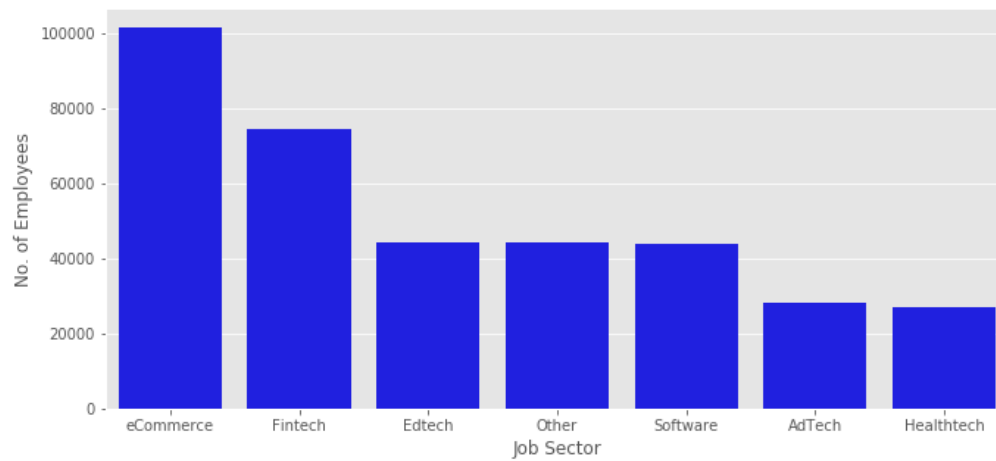
3450 Unique Companies

Information Scraped:

1. Company Name
2. Address
3. Date Founded
4. Industry Sector (1st, 2nd, 3rd)
5. Company Description
6. Total Jobs Available
7. Total Employees
8. Total NYC Employees
9. Investor Funding

*More detailed information on site
for future scraping*

Top Job Sectors by Total Employees



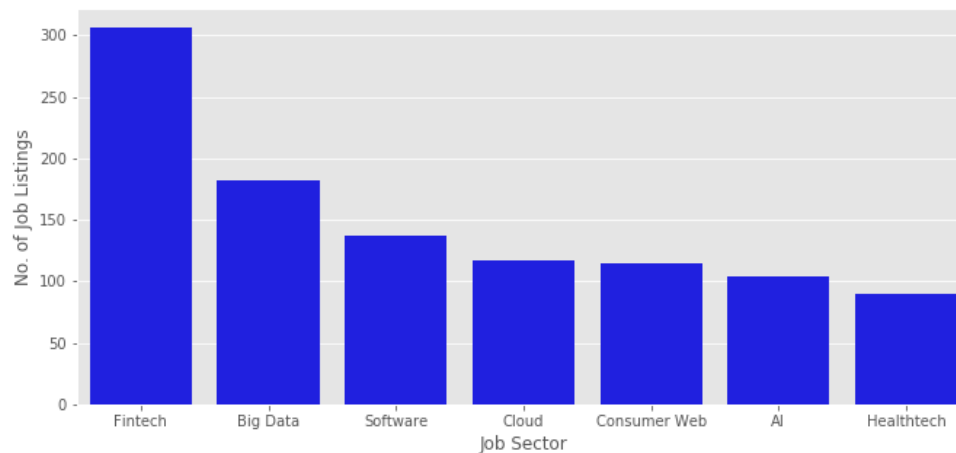
Top Sector by Total Number of Companies Formed that Year

Year	Top Job Sector 1st	Top Job Sector 2nd
2011	AdTech	Mobile
2012	Software	Information Technology
2013	AdTech	Software
2014	Fintech	Software
2015	eCommerce	Software
2016	Fintech	Fintech
2017	Artifiical Intelligence	Fintech
2018	Artifiical Intelligence	Software
2019	Healthtech	Information Technology
2020	Artifiical Intelligence	Healthtech

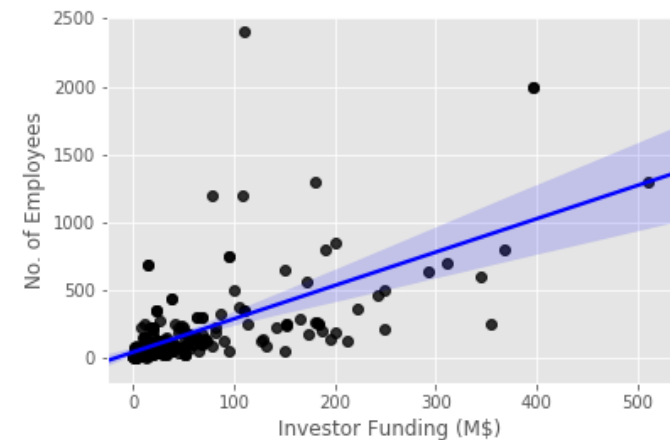
eCommerce and Fintech are top tech employers in region

Recent trend is formation of companies in Artificial Intelligence and Healthtech

Top Sectors by Number of Job Listings



Total Employees vs. Investor Funding



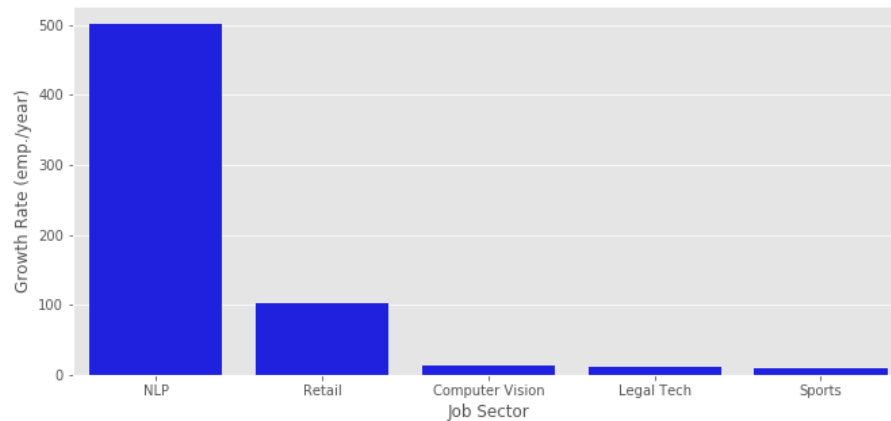
Fintech tops job listings, but Big Data, Software, Cloud now appear

More investor funding means more employees => good sanity check

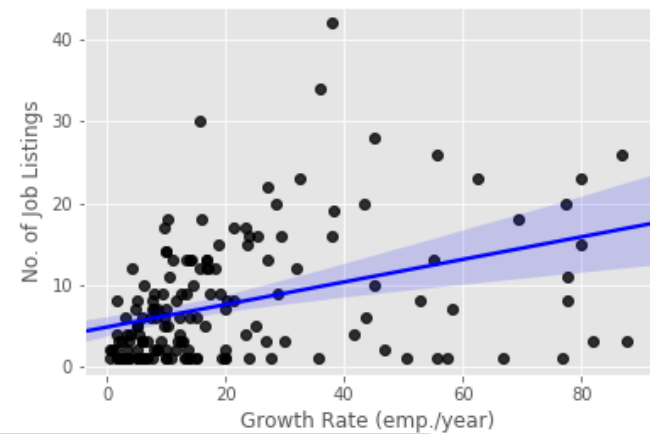
Define new parameter “growth rate”

$$\text{Growth rate} = \frac{\text{Total no. of Employees}}{(2021 - \text{Year Founded})}$$

Top Sectors by Growth Rate



Job Listings vs. Growth Rate



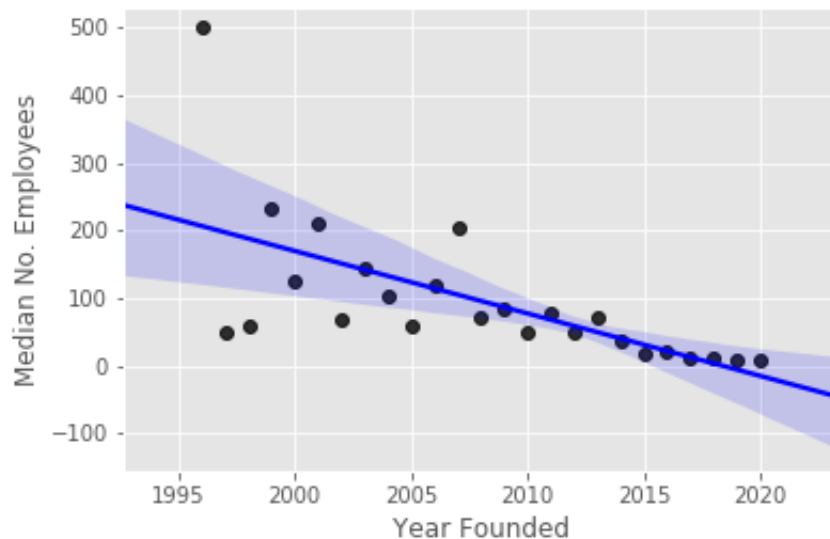
Natural Language Processing (NLP) dominates growth rate

Number of job listings correlates with growth rate

Be careful of outliers!

What is the lifetime of a start-up company?

Median number of employees vs. year founded



According to linear regression, number of employees increases with years since founding.

Confidence interval spreads with increasing years. Some companies are big success, others fail.

Stable number of employees peaks at about 10 years.

CONCLUSIONS

- Data from start-up company listings provides size and growth information on tech sectors in NYC
- Insights useful for job seekers, employers looking for workers, and investors identifying top trends.
- Future work possibilities include NLP on company descriptions, companies by location, desirability of company perks, and other "Builtin" city sites.