Fintech Hiring Trends in the largest Banks in the US

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Introduction

- Financial technology, often termed as FinTech, is the technology innovation which is competing with the traditional financial methods on the delivery of the services.
- Most companies in the banking sector are using FinTech to improve the customer service and increase the revenue growth thus providing end to end financial services using the Internet.
- Some of the Fintech applications include the use of technologies like mobile banking, cryptocurrency and investing services, trade and risk management.
- In our experiment we are analysing the the hiring trends in FinTech industries and understand if a particular skill is given preference while generating job applications in this sector.

Data Collection and Processing

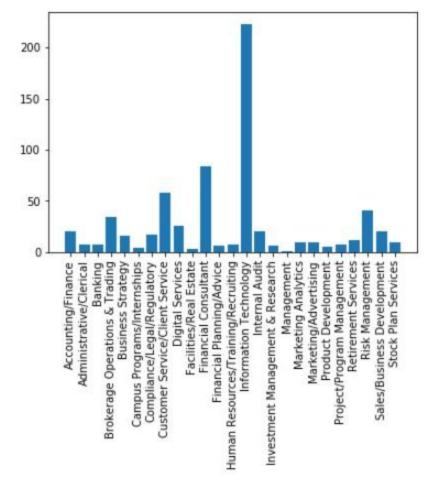
- In order to understand the industry and upcoming technologies of Fintech we studied 4 reports summarized by the World Economic Forum(WEF).
- The data was extracted from the reports and cleaned. From the cleaned text the keywords are selected based on the following 3 procedures.
 - a) Word count

- b) Text Rank
- c) TF/IDF
- 3 csv files were generated containing the top 100 keywords of FinTech from the above procedures.
- We analyzed two leading companies in the FinTech industry, namely, Charles Schwab Bank and PNC Financial Services Group Inc. in order to obtain information about the Job postings available in each of them.
- The online job postings were crawled using BeautifulSoup to obtain further details.
- Each job posting is parsed and separately matched with the 3 keyword files extracted in the first section. The data set is stored as csv files with the prescribed headers.

Data Analyzing

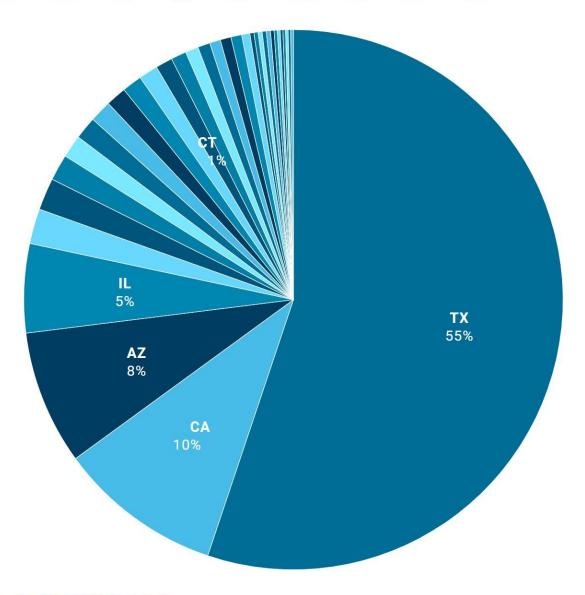
- The compiled csv data files are analyzed using the matplotlib library and Data wrapper to generate visual representation of the data scraped.
- This visualization is used to draw insights of the hiring trends.
- The visualization graphs presented depicts:
 - the proportion of the categories in which the companies hire.
 - o the number of jobs offered in a one location.
 - o Popular keywords used by companies while advertising their posting.

Job Listings based on Categories - Charles Schwab Bank



[Geographical Distribution of Jobs]





Get the data • Created with Datawrapper



[PNC-Frequency] PNC lenders innovation 3,316 regulatory cloud-based 2,817 partnerships 2,613 experience 1,712 servicing 1,634 development 1,215 cryptocurrencies 1,025 intelligence 687 equity 572 496 technology 493 ecosystem 358 investments 318 bank 299 cognitive lending capital credit intermediaries 213 transactions 206 commercial government [PNC-Tf-IDF] PNC 493 Crowdfunded blockchain.info/ch 183 asset 106 fragmented Investments laundering Risk Algorithm funding 22 17 16 Statistics Information database Cloud asurability peer-base Cloud forbes.com/sites/j algorithms ECOSYSTEM banks/payment Stocks Workforce [PNC-TextRank] PNC entity automation 3,477 delineation guarantor' capital electrnofied benchmar computing reconciliation 216 137 117 improved incumbent consortia gradual albeit security commoditize crowdfunding post-trade block-chain acceleration improvement diligenc credit

[Schwab-Frequency] 1721 capital 1,039 911 lenders regulatory 798 696 economic financial 640 611 experience 589 transactions 528 legal 392 trading cloud-based 253 customer 233 servicing 230 bank technology 213 government commercial 198 178 partnerships 177 provisioning 161 digital 145 services management 140 collateral information intermediaries [Schwab-TextRank] 1721 solvency marketplace 213 quantitative 161 participate auditor 161 renewal improvement gradual wearable large-scale brokerage salesforce 84 improved incumbent regionalizatio discount trading' transformation project infrastructure outlook automation [Schwab-Tf-IDF] 407 Computing 115 Mortgage payouts Stocks ernet-of-Things Cybersecurity standardisation optimization Cloud cloud/platform deployment securitisation 33 laundering hacking science industrial Cryptocurrency modernizing www.deloitte.com globalization Crowdfunded Digitizatization taxation database

Inferences

- FinTech industry shows an increased inclination towards hiring Information Technology followed by Financial Consultants and Customer Service technicians.
- South-eastern states and New England states have most number of job openings.