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# SALARY PREDICTION

## GOAL

 Given a user-inputted county, predict salary and provide information about the job market in that area

```
Inter a county name: San Francisco

Average salary is: $115995.479257

Top rated employers in this area:
LiveRamp: 4.7
AppDynamics: 4.6
Facebook: 4.5
Guidewire: 4.4
Google: 4.4
Square: 4.3
Airbnb: 4.3
Uber: 4.2
Salesforce: 4.2
Dropbox: 4.2
```

## HOW WE GOT OUR INFORMATION

- Census API, Census data downloads (CSV files)
- Glassdoor API
- Scraping from other site

## DIFFICULTIES OF DATA

- Software developer density was between 3-25,000
- Had to normalize much of our density and population data, as population growth is exponential
- Some APIs blocked access to prevent botting

## WHAT'S IN THE ALGORITHM

- Density of software developers per square mile of land
- Population
- Distance from center of the US
- Average salary of state

LiveRamp: 4.7 AppDynamics: 4.6 Facebook: 4.5 Guidewire: 4.4 Google: 4.4 Square: 4.3 Airbnb: 4.3 Uber: 4.2 Salesforce: 4.2 Dropbox: 4.2 Pinterest: 4.1 Twitter: 4 Autodesk: 3.9 Splunk: 3.9 Trulia: 3.9 Ouantcast: 3.9 Workday: 3.8 Electronic Arts: 3.8 Informatica: 3.8 Intuit: 3.8 Accenture: 3.7 Evernote: 3.7 Sun Microsystems: 3.6 Zynga: 3.5 Yelp: 3.5 SolarCity: 3.5 Oracle: 3.4 Charles Schwab: 3.4 IBM: 3.3 MobiTV: 3.3 Gracenote: 3.3 Walmart eCommerce: 3.2 StubHub: 3.1 GE Digital: 3 E\*TRADE Financial: 2.9 EFI: 2.9 Visa Inc.: 2.8 Blackhawk Network: 2.8 Nextag: 2.7 Rearden Commerce: 2.3

Facebook: 4.5 Google: 4.4 AppNexus: 4.3 MongoDB: 4.2 Knewton: 4.1 Ladders: 4 Microsoft: 3.9 Morgan Stanley: 3.7 Goldman Sachs: 3.7 Accenture: 3.7 Ericsson-Worldwide: 3.7 Bloomberg L.P.: 3.6 FactSet: 3.6 Cognizant Technology Solutions: 3.6 Commvault: 3.6 Misys: 3.6 Zocdoc: 3.6 Thomson Reuters: 3.5 J.P. Morgan: 3.5 Verizon Wireless: 3.5 Infosys: 3.5 New York Times: 3.4 Citi: 3.4 Bank of America: 3.4 UBS: 3.4 Amazon.com: 3.4 Tata Consultancy Services: 3.4 Verizon: 3.4 AT&T: 3.4 IBM: 3.3 CA Technologies: 3.3 S&P Global Market Intelligence: 3.3 Barclays: 3.3 Audible: 3.2 Medidata Solutions: 3.2 Wipro: 3.2 Amplify: 3.1 IGATE: 3.1 IAC: 3.1 e-Business International: 3

#### **RESULTS**

#### San Francisco

Predicted: \$115,995.48

Actual: \$110,554

#### San Diego

Predicted: \$95,443.30

Actual: \$92,016

#### Ventura

Predicted: \$89,235.85

Actual: \$87,279

#### Houston

Predicted: \$68,313.08

Actual: \$75,053

#### St. Louis

Predicted: \$87,469.17

Actual: \$75,000

#### Somserset

Predicted: \$95,705.28

Actual: \$94,946

## DATA VALIDATION

- Payscale, Glassdoor
- College surveys
- Self-reported employer data (mostly public jobs)

### **EXTRA FEATURES**

Glassdoor data - get ratings, reviews, etc

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```

## **EXTRA FEATURES**

- Any occupation, not just software development
- Cost of living calculator
- Include income/property/etc. taxes
- Add preferences for setting, demographics, etc.

## Take control of your future.

Make sure your finances are secure



