



# STACK OVERFLOW DEVELOPER SURVEY 2019

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
- Discussion
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

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- The context and goal of data analysis.
- Methodology Explained.
- Evidence based results and findings.
- Discussion of findings, challenges and limitations.
- Conclusion.

# INTRODUCTION

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- It is a comprehensive survey of people who code around the world.
- Random survey samples do not necessarily represent the developer community evenly but provide insights.
- Around 75,000 developers participated in the survey.
- The Goal of the analysis is to understand the present and gain foresight about the state of the art in the future.
- Description of participant developers around the world.

# METHODOLOGY

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- Data Collection and Exploration
- Data Wrangling
- Exploratory Analysis
- Data Visualization
- Dashboards

# RESULTS



# PROGRAMMING LANGUAGE TRENDS

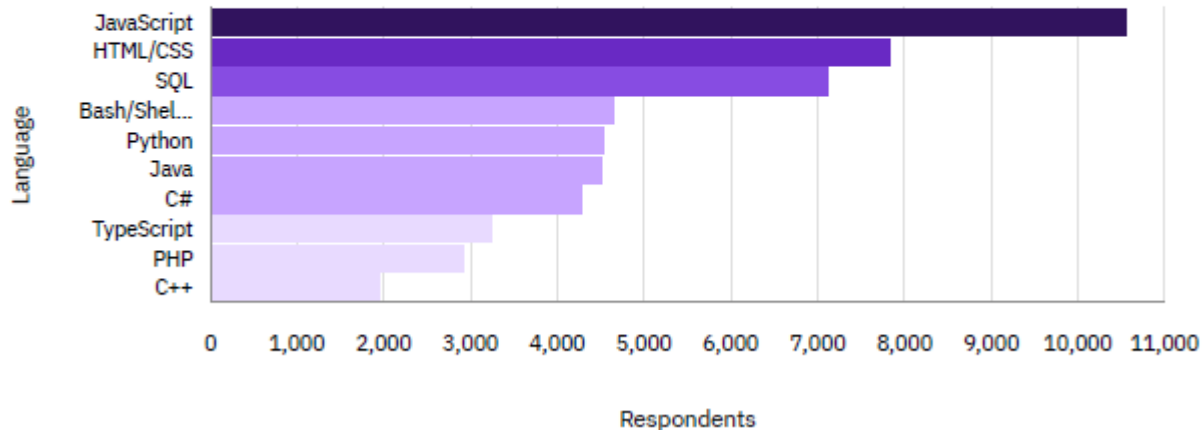
## Current Year

Top 10 Languages Respondents Worked With

Respondents Count



1,946 10,556



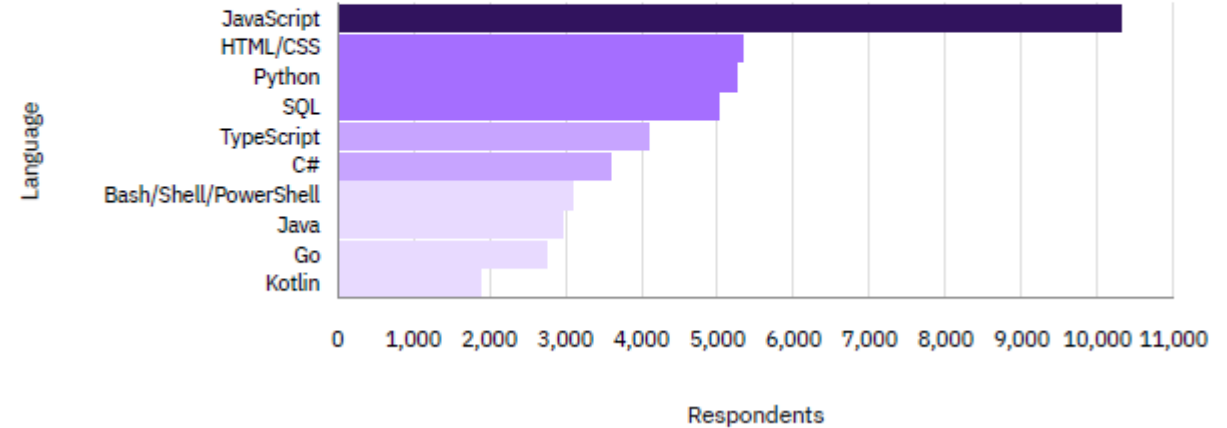
## Next Year

Top 10 Languages Desire Next Year

Respondents Count



1,890 10,302



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- JavaScript & HTML/CSS shows to be top dominant languages.
- Python & TypeScript are climbing the top 10 languages ladder.
- New language joined the top 10 race.

## Implications

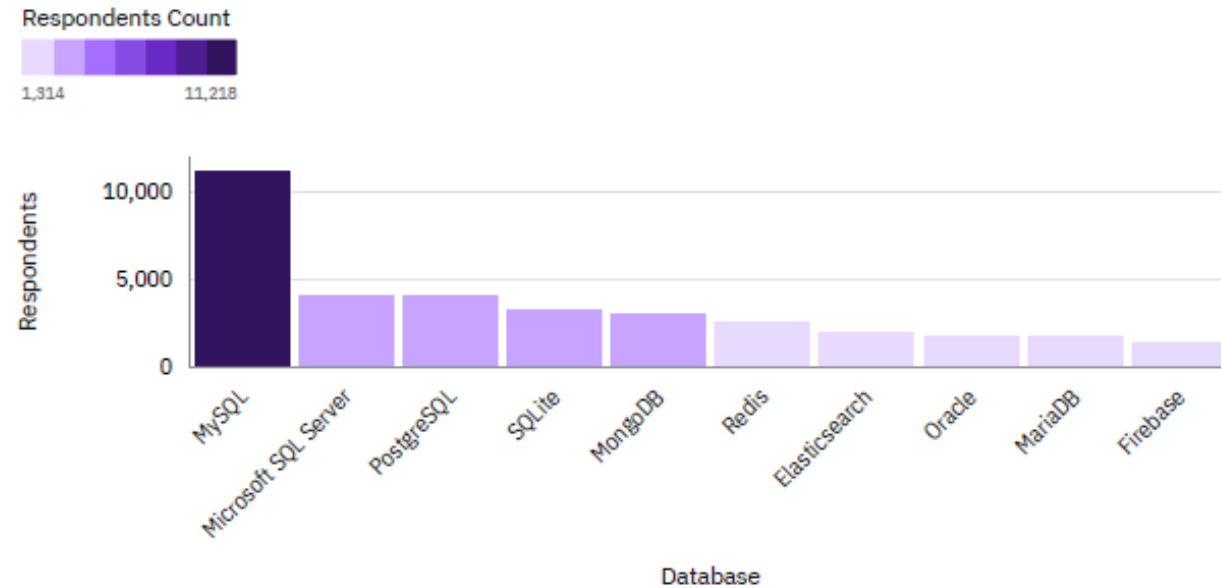
- Bash/Shell/PowerShell and Java are in decline.



# DATABASE TRENDS

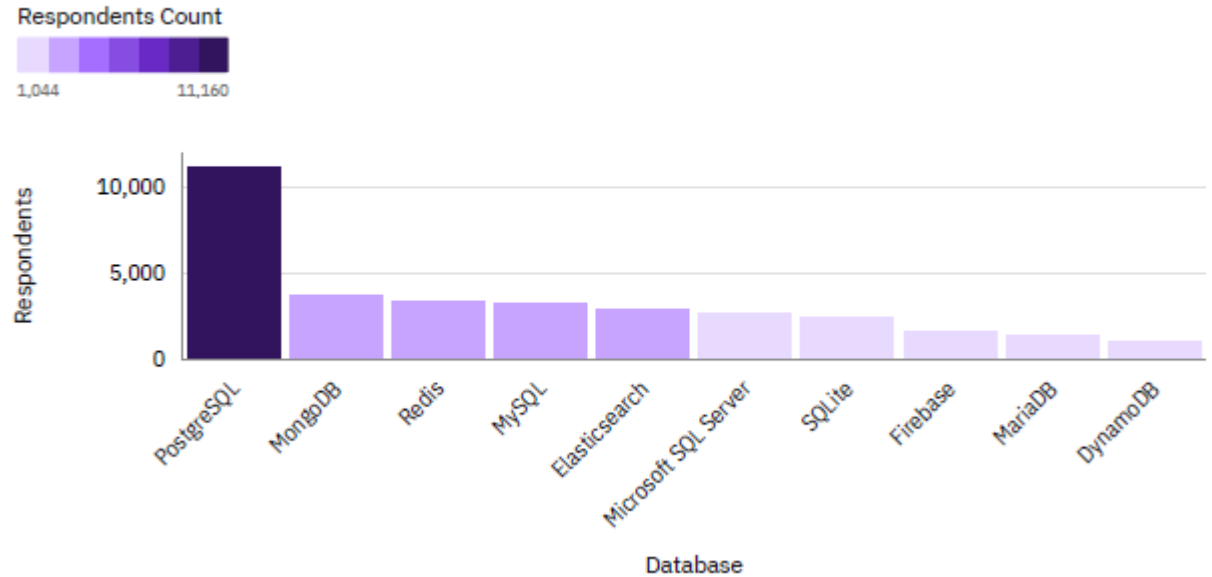
## Current Year

Top 10 Databases Respondents Worked With



## Next Year

Top 10 Databases Desire Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- PostgreSQL & MongoDB respectively are fast-growing
- MySQL & Microsoft SQL Server popularity are expected to decline.
- New Databases are gaining popularity and joining the race.

## Implications

- Firebase & Oracle are expected to be eliminated from top 10 databases.

# DASHBOARD

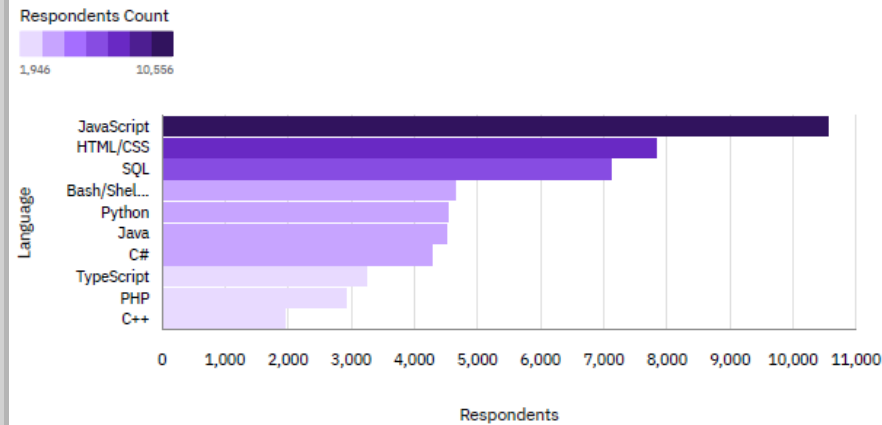
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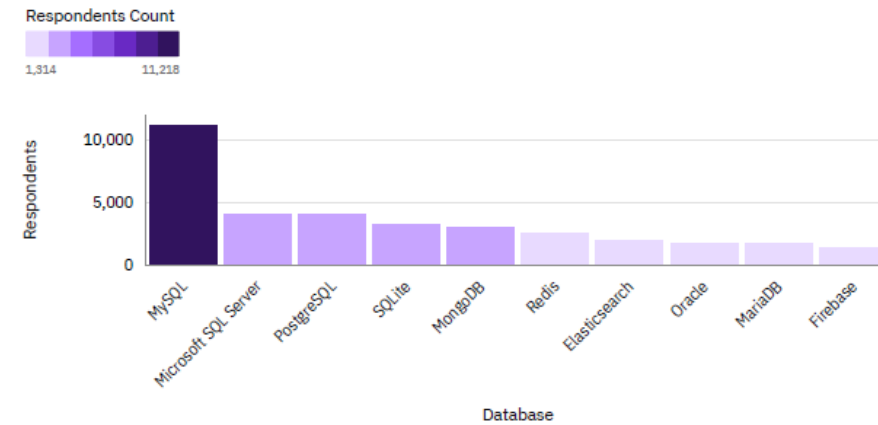
**GitHub Link:** [Stack Overflow Developer Survey 2019 dashboards](#)

# Current Technology Trend

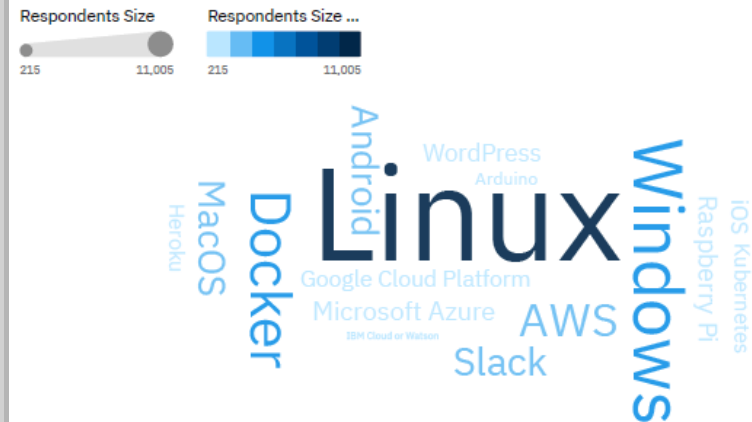
## Top 10 Languages Respondents Worked With



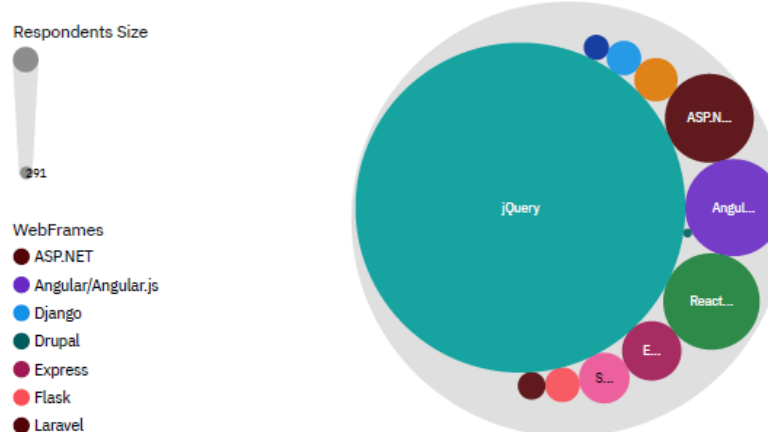
## Top 10 Databases Respondents Worked With



## Platforms Respondents Worked With

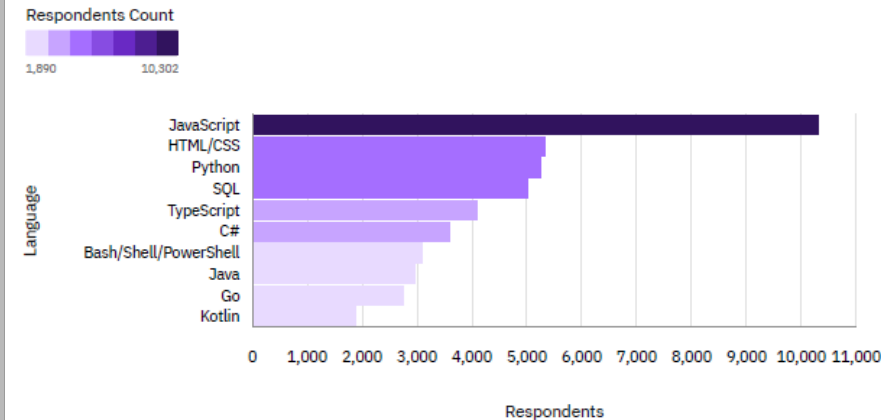


## Web-Frames Respondents Worked With

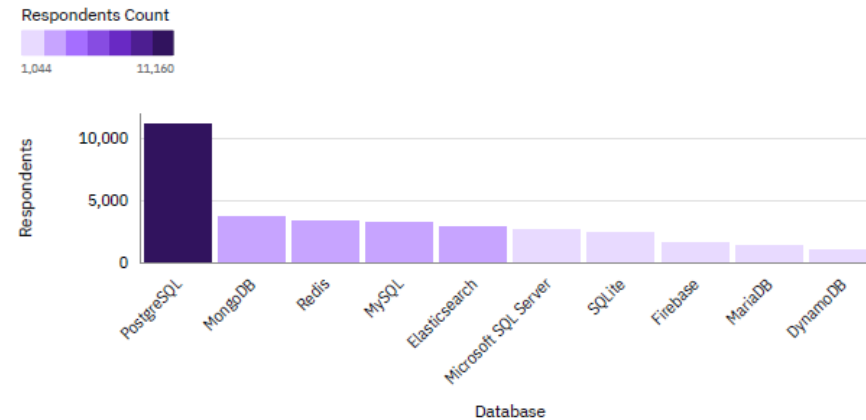


# Future Technology Usage

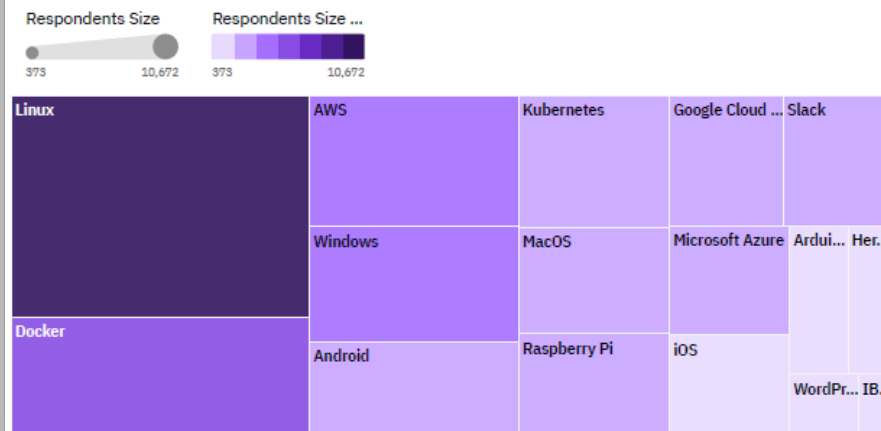
## Top 10 Languages Desire Next Year



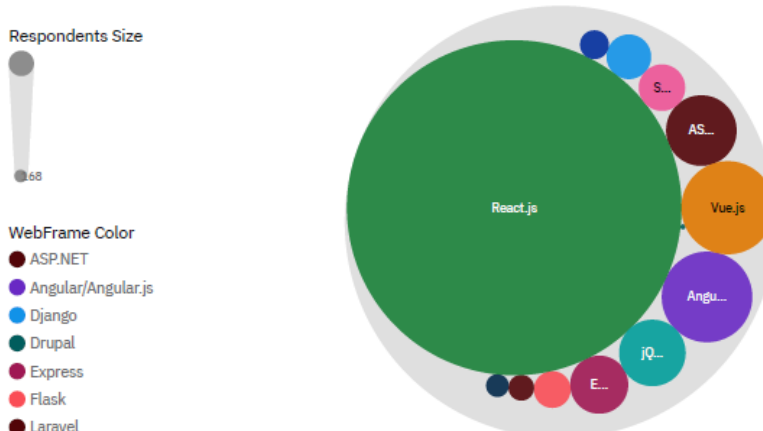
## Top 10 Databases Desire Next Year



## Platforms Desire Next Year



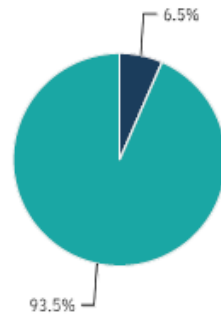
## Web-Frames Desire Next Year



# Demographics

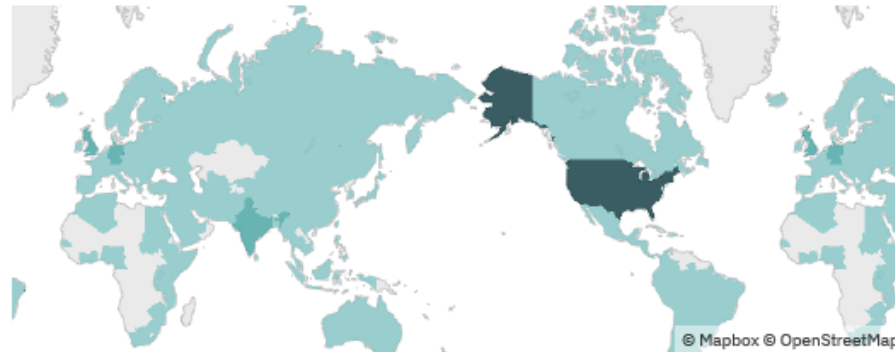
Respondents classified by Gender

Gender  
● Woman ● Man

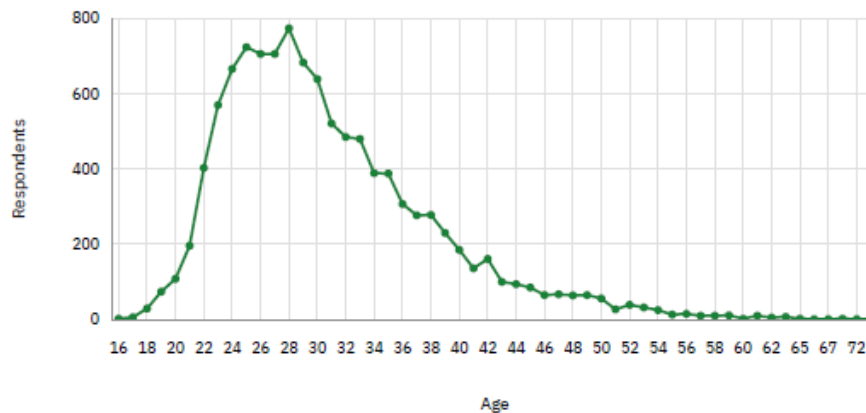


Countries of Respondents

Respondent (Cou...  
1 3,058

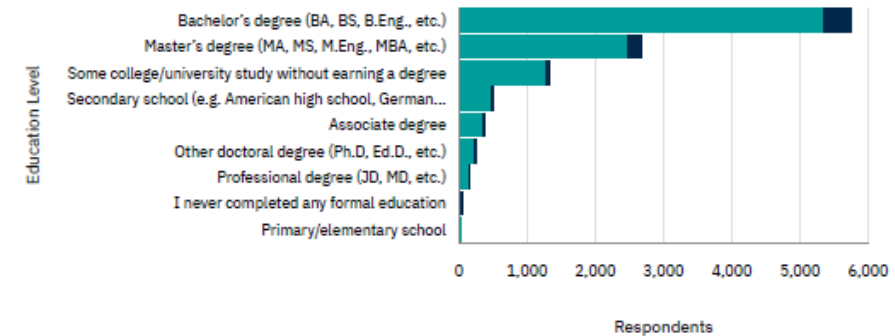


Respondents by Age



Respondents by Education Level & Gender

Gender  
● Man ● Woman



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- Python & PostgreSQL are fast growing as programming language and database.
- Linux seems to remain dominant platform while React.js topped Webframes.
- Strong youth presence in IT.
- Pure skills contending with formal education might grow.

## Implications

- PowerShell & MySQL are in decline respectively.
- Windows lagged behind for Docker as well as jQuery Webframe.
- 3.5 Male respondents predicts more male developers.
- Majority of developers in developed countries



# CONCLUSION

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- Change is the only constant in Tech world “survival to the most adaptive”.
- Huge gender gap in IT needs further multi-variate analysis.
- Concentration of developers in developed countries insight investigating relation and correlation with immigration trends and governance issues in 3<sup>rd</sup> world countries.
- Youth leading IT inspire further studying of skills revolution over formal education.

# APPENDIX

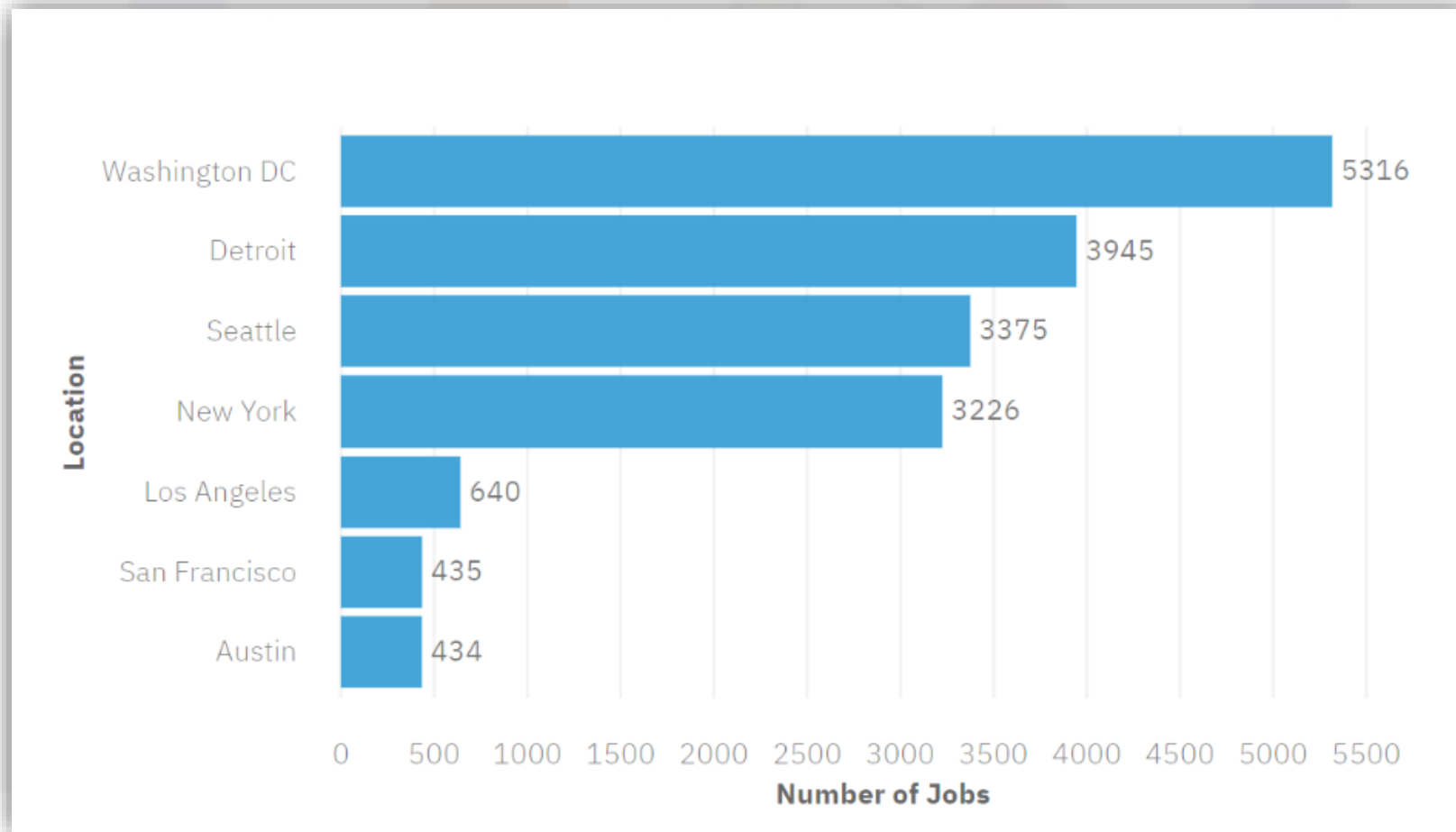
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- Data source: [Open Database License](#).



# JOB POSTINGS

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# POPULAR LANGUAGES

