



## Analysis on Emerging Technology Skills and Trends

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

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- Data Purpose
- Techniques and methodology
  - Cultivating Data
  - Manipulating and analyzing data
  - Visualizing the data
- Results presented in plots and charts
- Demonstrate the findings and results in dashboard.
- Conclusions

# INTRODUCTION

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- The first task is to collect the top programming skills that are most in demand from various sources
- Once we collect enough data, we begin analyzing the data and identify insights and trends such as:
  - What are the top database skills?
  - What are the top programming languages in demand?

# METHODOLOGY

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- Data gathering from : Libraries - APIs - Webscraping
- Data Preprocessing
- Data analysis
- Data Visualization
- Dashboards

# RESULTS

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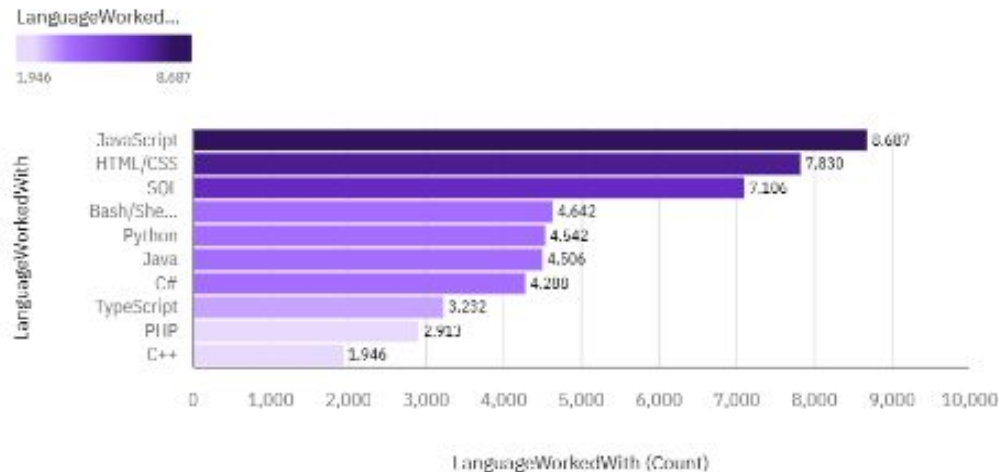


# PROGRAMMING LANGUAGE TRENDS

Current  
Year

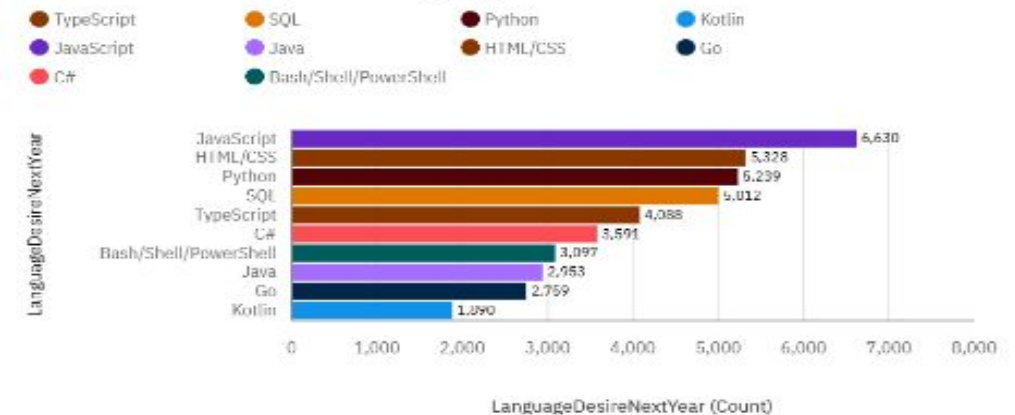
Next  
Year

Top 10 Language Worked With



Future Technology Trend

Top 10 Language Desire Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- JavaScript is the leading language.
- Python is getting popular
- HTML/CSS are also there in the Top

## Implications

- Web Technology is still at the top.
- Data science is arising

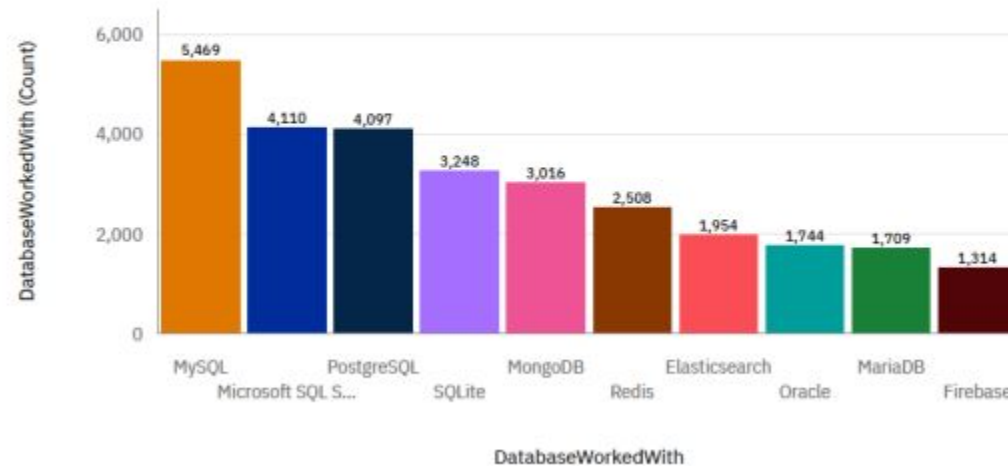


# DATABASE TRENDS

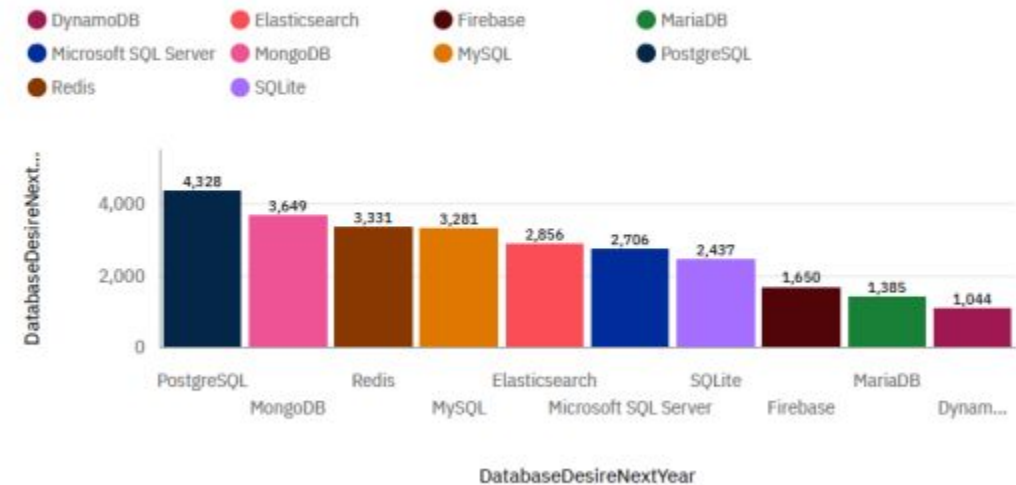
Current  
Year

Next  
Year

Top 10 Database Worked With



Top 10 Database Desire Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- MySQL maybe the 2nd to Postegres
- MS SQL will go down the rankings
- MongoDB will go higher

## Implications

- MYSQL and Postegres are at the top
- MS SQL may need to do some changes.
- Mongo DB gains more popularity and use.

# DASHBOARD

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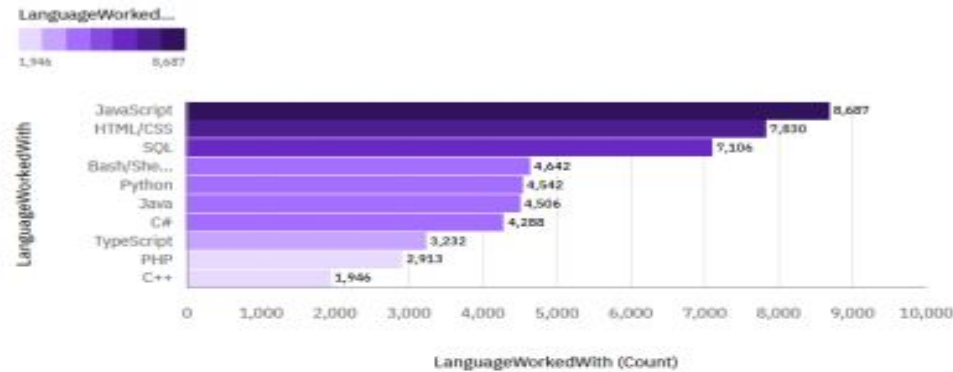
[Aziz-fer/Analysis-on-Emerging-Technology-Skills-and-Trends \(github.com\)](https://github.com/Aziz-fer/Analysis-on-Emerging-Technology-Skills-and-Trends)



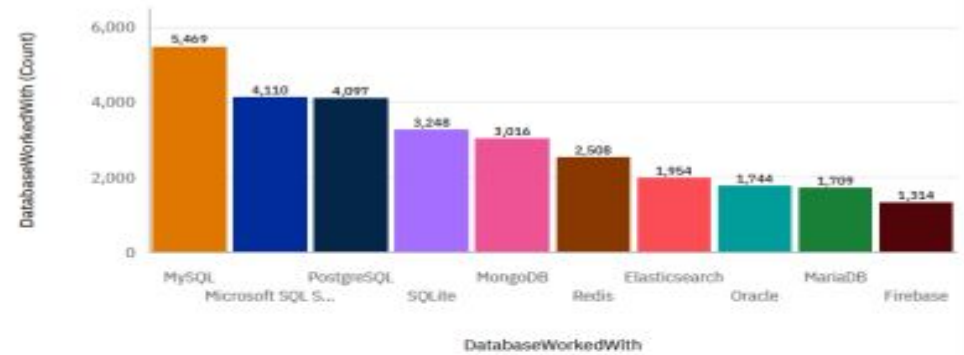
# DASHBOARD TAB 1

## Current Technology Usage

### Top 10 Language Worked With



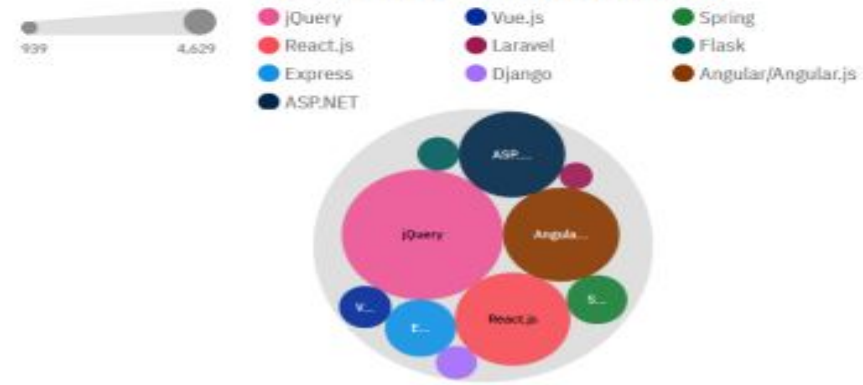
### Top 10 Database Worked With



### Platform Worked With



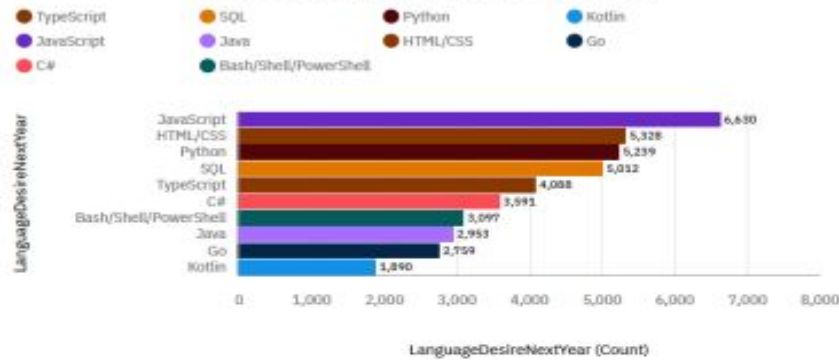
### Top 10 Web Frame Worked With



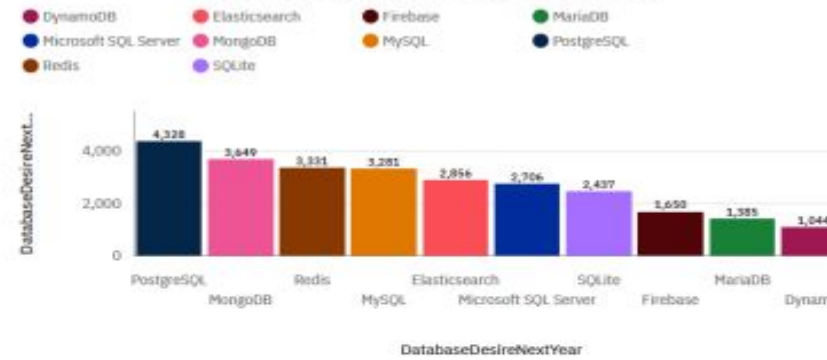
# DASHBOARD TAB 2

## Future Technology Trend

### Top 10 Language Desire Next Year



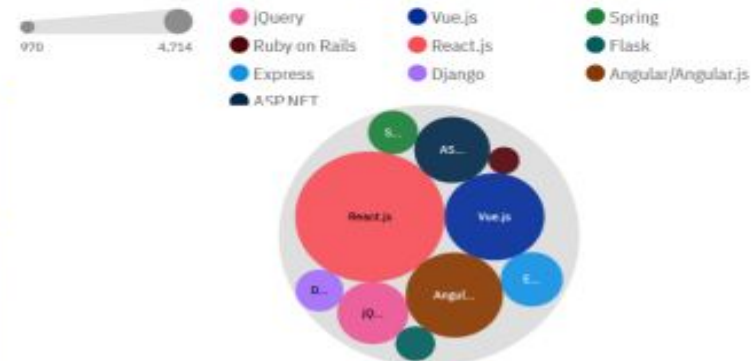
### Top 10 Database Desire Next Year



### Platform Desire Next Year



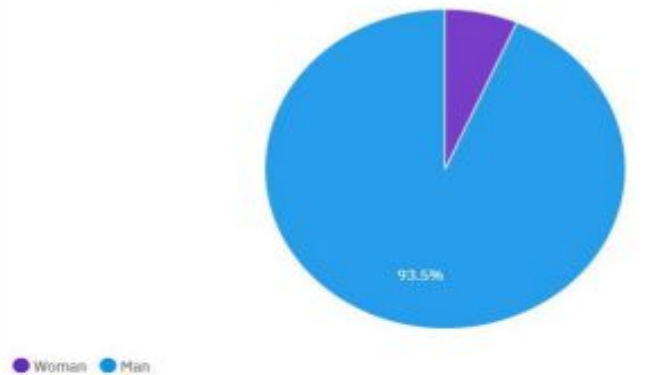
### Top 10 Web Frame Desire Next Year



# DASHBOARD TAB 3

## Demographics

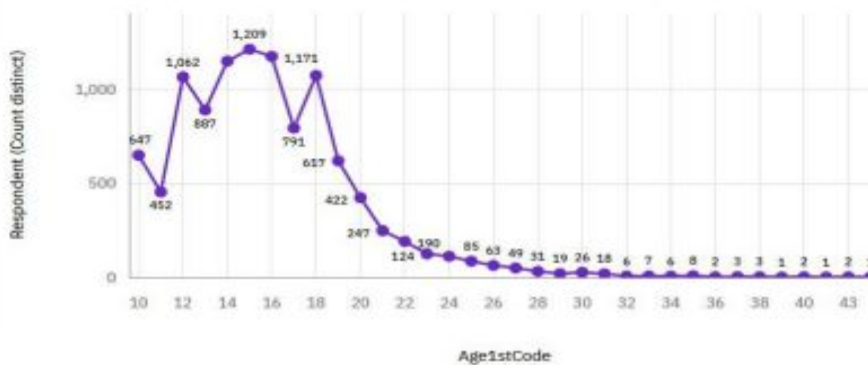
Respondent classified by Gender



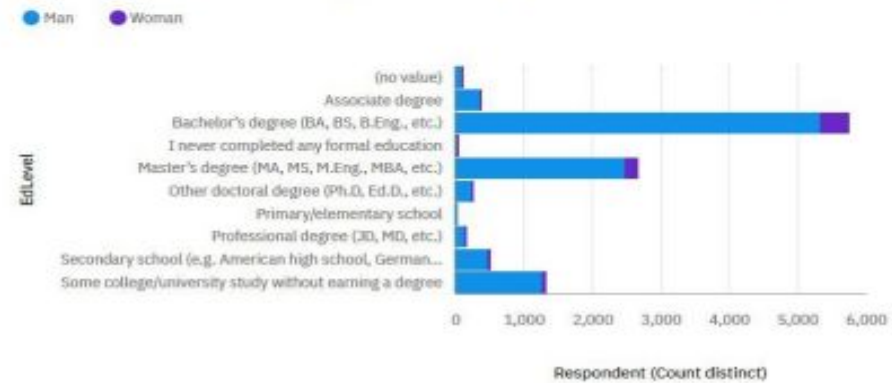
Respondent Count for Countries



Respondent Count by Age



Respondent Count by Gender and Formal Education Level



# DISCUSSION

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Is Bachelor enough or should we pursue higher degrees?  
New database servers are on their way to compete in the market.



# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- Most people have a Bachelors' degree.
- Web development languages are the most popular and on-demand tools in the IT field currently.

## Implications

- Web development is still a very on demand skill.
- It is important to develop skills in NoSQL in addition to SQL.
- There is not much of a need to complete master or PHD degree to just get a work



# CONCLUSION

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- Learning different techniques in programming is very useful.
- The programming landscape is changing and how important technology is to fostering innovation in a variety of industries.
- Developers have many options and variety of programming method.
- A grasp of different database systems and programming languages is necessary for developers to satisfy the needs of modern applications.

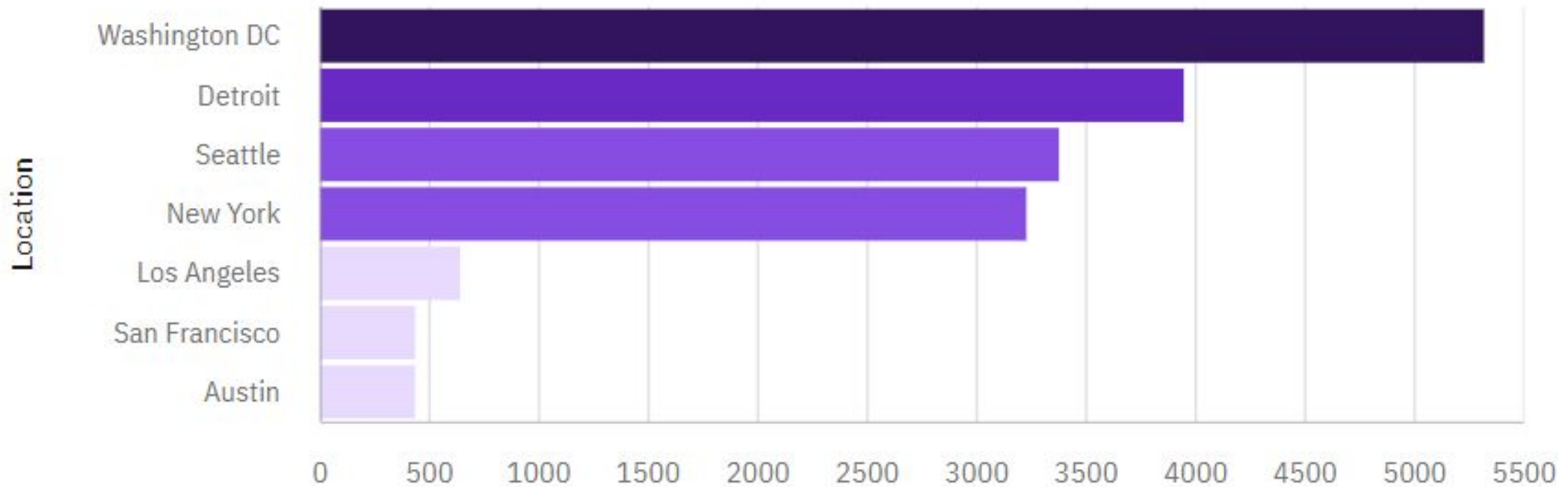
# APPENDIX

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# JOB POSTINGS

Number\_of\_Jobs (...)



# POPULAR LANGUAGES

Annual average salary by Language name

annual average sa...

