

# Data analysis and insights for the tech industry

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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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- Overview of data analysis process and finding
- Point2
  - Sub Point 1
  - Sub Point 2
  - Sub Point 3
- Point3
- Point4
- Point5



# INTRODUCTION

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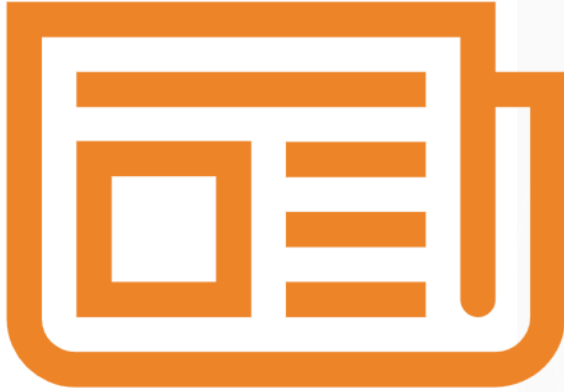


- Data from Stack Overflow annual Developer Survey
- Purpose of the data analysis:
  - To identify emerging skills and trends in demand
- Current and potential future developers in the digital and tech industry
- Trending skills to pay attention to



# METHODOLOGY

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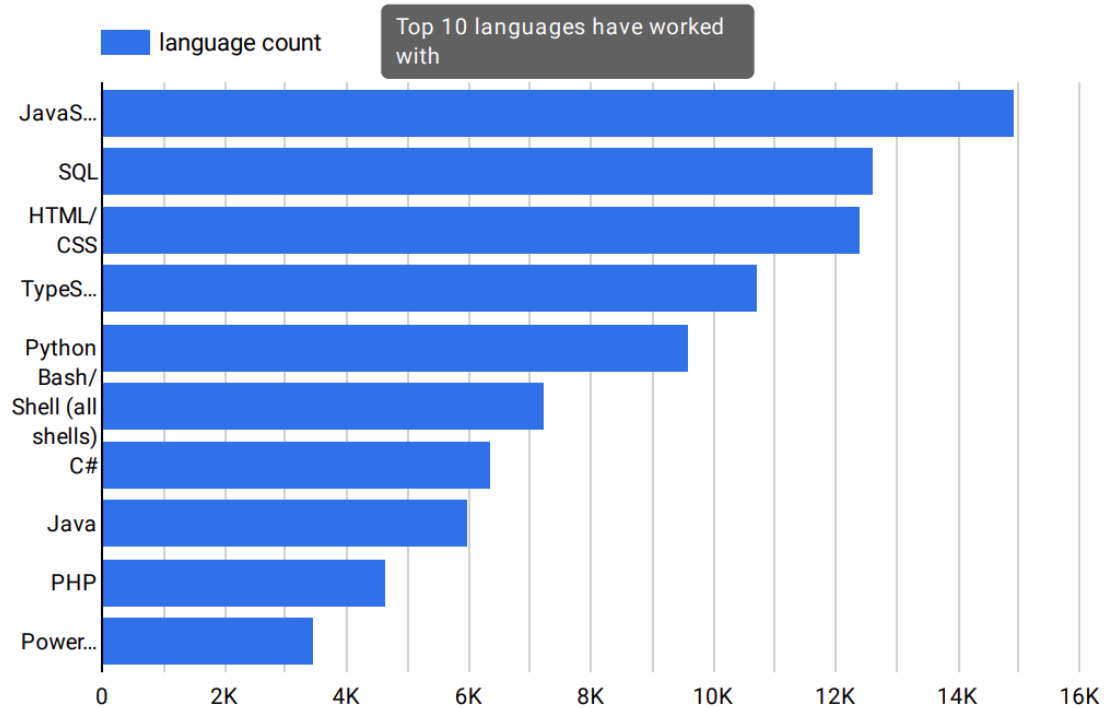


- Survey data available from <https://survey.stackoverflow.co/>
- Data wrangling
- Exploratory data analysis
  - Analysing data distribution
  - Handling outliers
  - Correclations
- Data visualization
- Dashboard

# PROGRAMMING LANGUAGE TRENDS

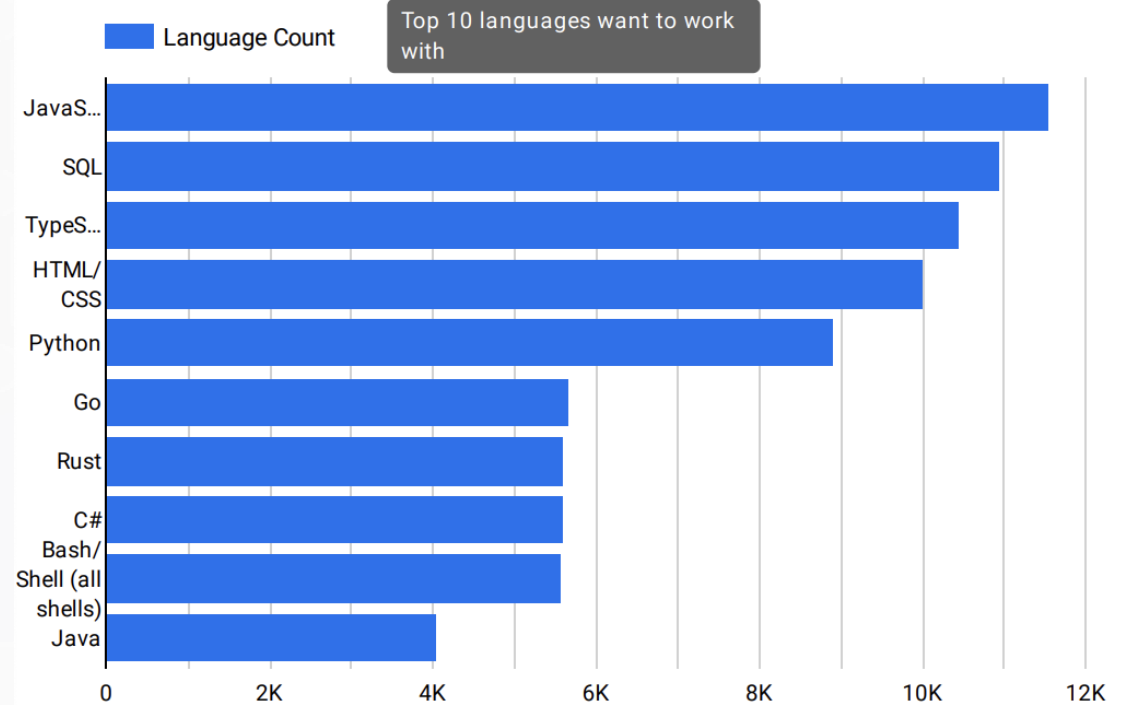
## Current Year

Top 10 languages have worked with



## Next Year

Top 10 languages want to work with



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

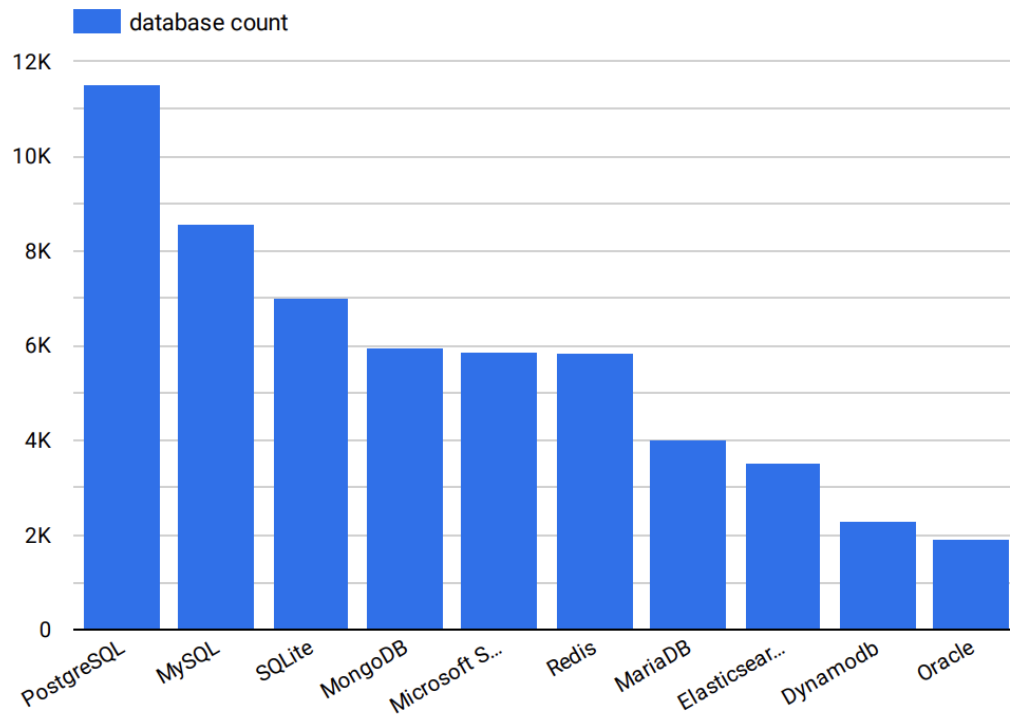
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- **JavaScript and SQL remain the leading programming languages this year and are projected to retain their top spots next year**
  - Worth prioritizing training in JavaScript and SQL to strengthen frontend and backend development capabilities
- **Rust and Go are becoming increasingly popular**
- **PHP and Java are experiencing a decline in popularity**

# DATABASE TRENDS

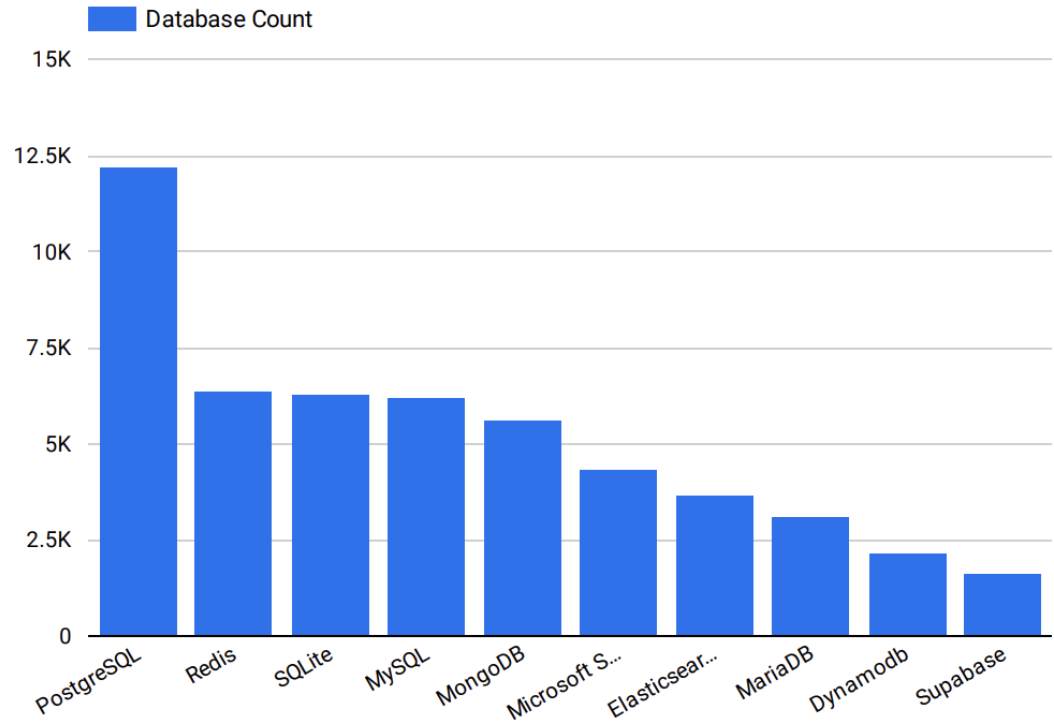
## Current Year

Top 10 databases have worked with



## Next Year

Top 10 databases want to work with





# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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- **PostgreSQL continues to lead as the most popular database this year and is projected to maintain its position next year.**
- **Redis is rapidly gaining popularity**
  - Driven by the growing demand for low-latency databases.
- **SQLite, MySQL, MongoDB remain widely used and reliable choices**

# DASHBOARD

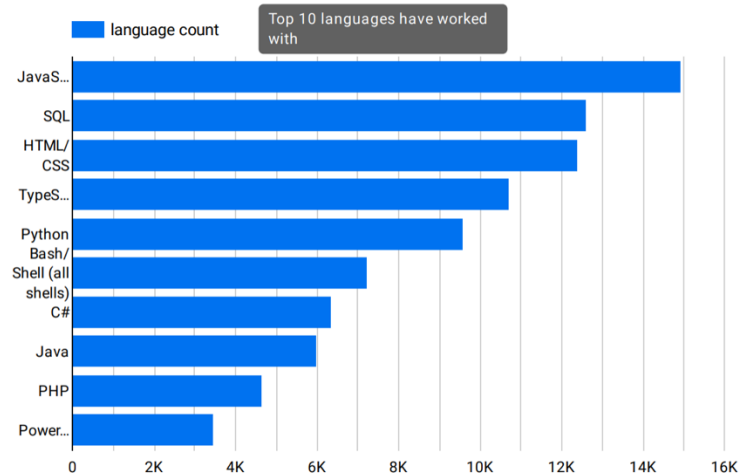
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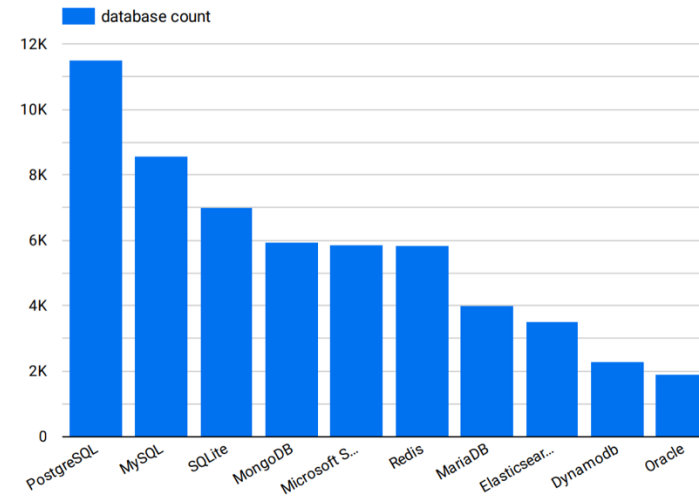
<https://github.com/Laamkh/ibm-data-analyst-coursera.git>

# Current technology usage

Top 10 languages have worked with



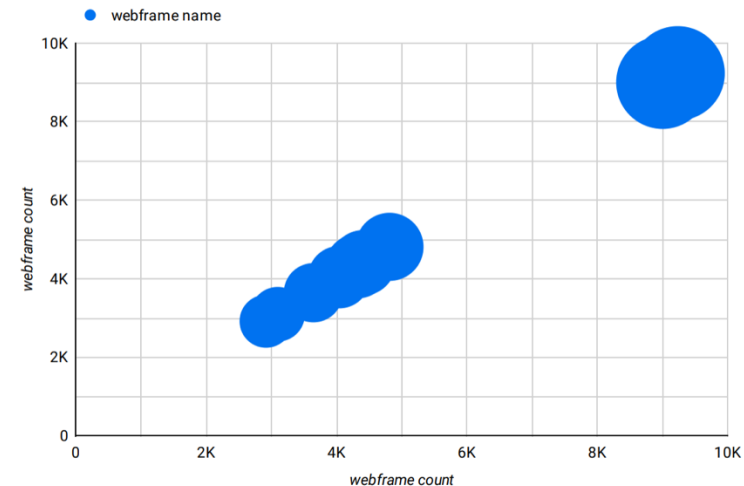
Top 10 databases have worked with



Top 10 platforms have worked with

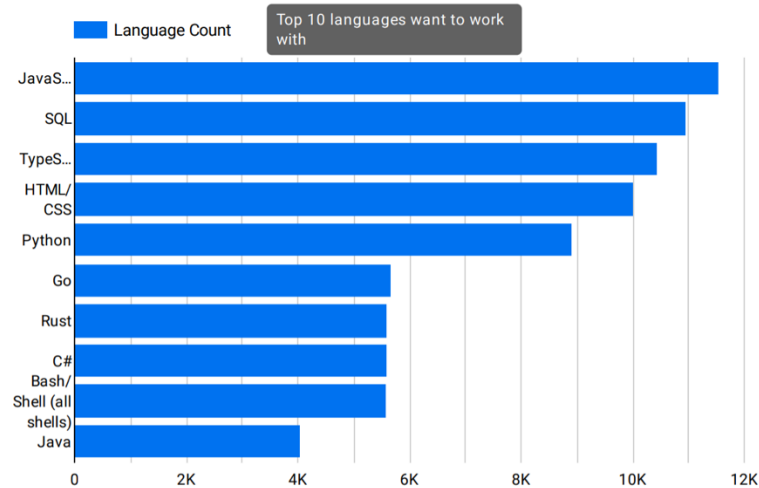


Top 10 webframes have worked with

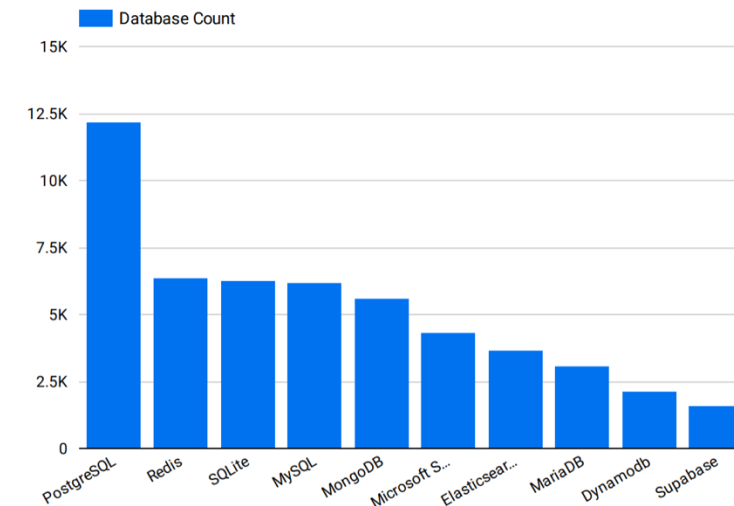


# Future technology trend

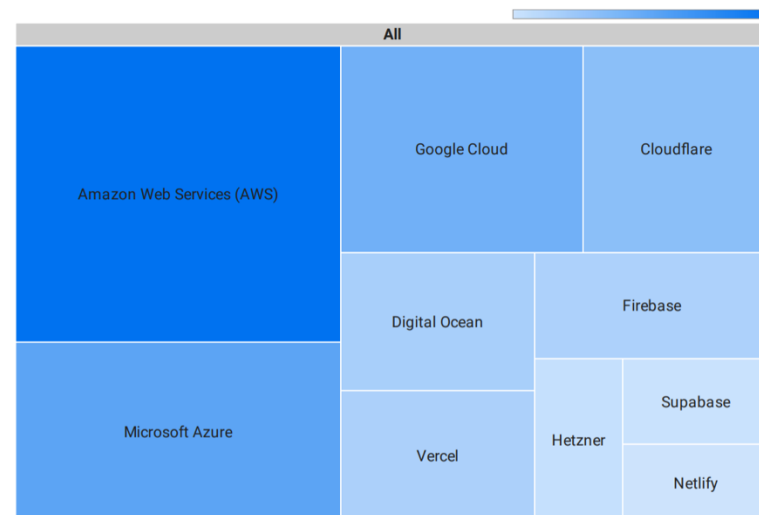
Top 10 languages want to work with



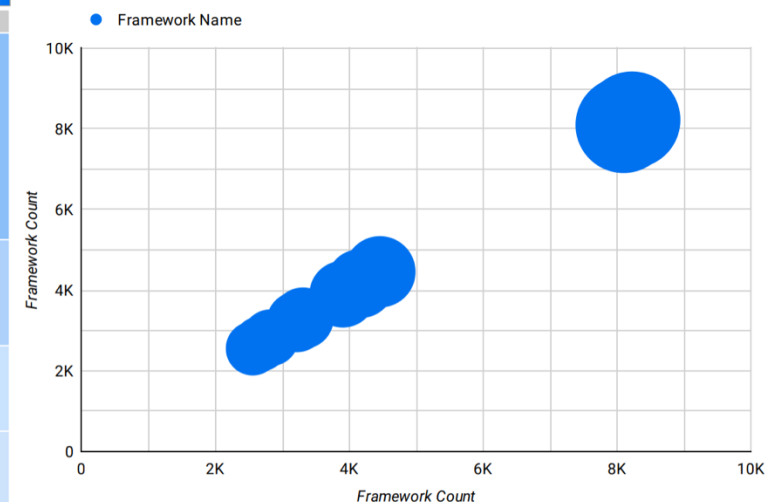
Top 10 databases want to work with



Top 10 platforms want to work with

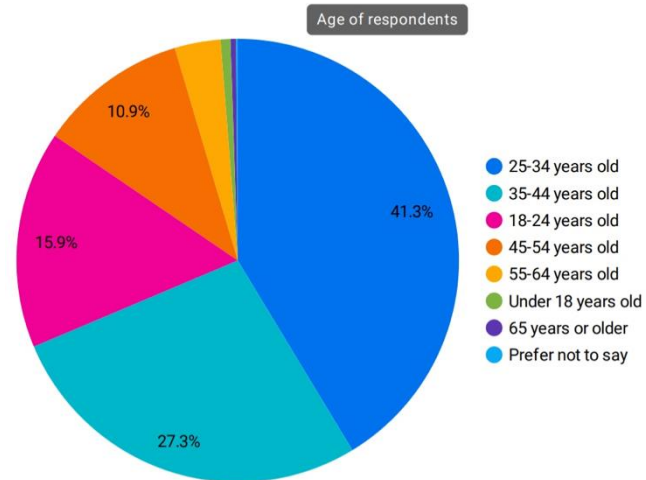


Top 10 webframes want to work with

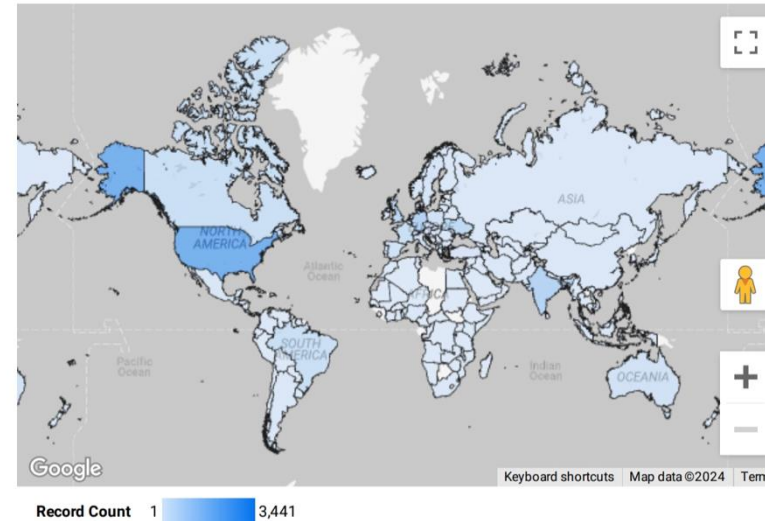


# Demographics of respondents

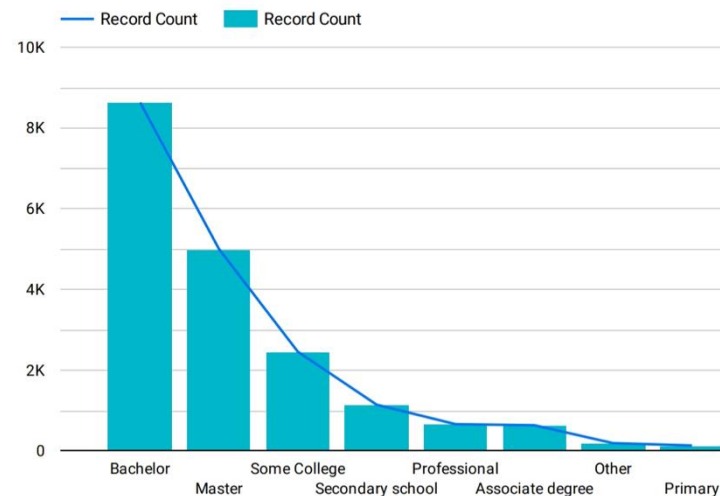
Age of respondents



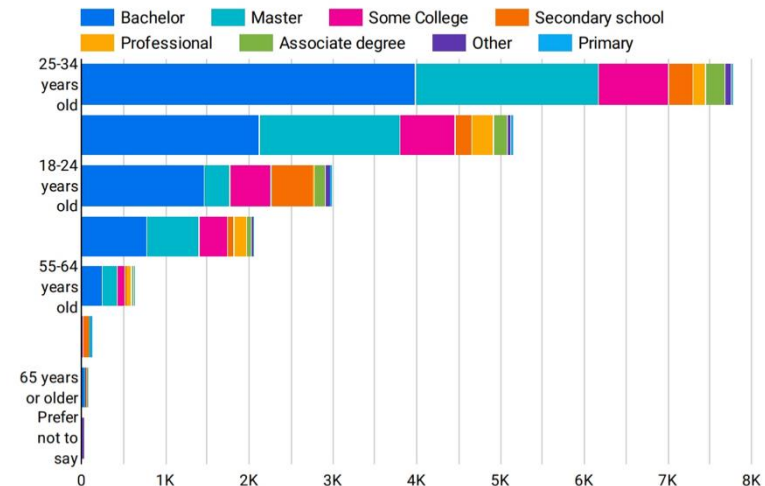
Respondents by countries



Respondents by Educational Level



Age and Educational Level of respondents



# DISCUSSION

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- **The majority of respondents hold a bachelor's degree or higher**
- **Most respondents are based in the United States**
- **The largest age group among respondents is 25-34 years old**

# OVERALL FINDINGS & IMPLICATIONS

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## **1. Javascript and SQL remains popular programming language choice**

- Worth investing training in Javascript and SQL

## **2. Growing interest in real-time data processing and cloud platforms**

- Redis
- AWS and Google Cloud

# CONCLUSION

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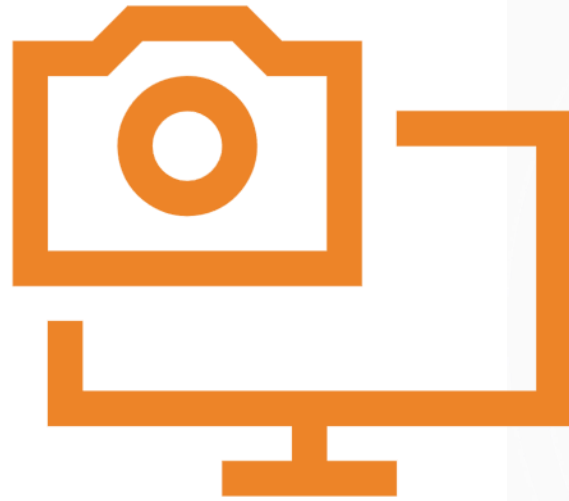
- Popular languages and database in use and future
- Composition of developers
- Tech industry is always evolving
  - Stay informed and Adapt



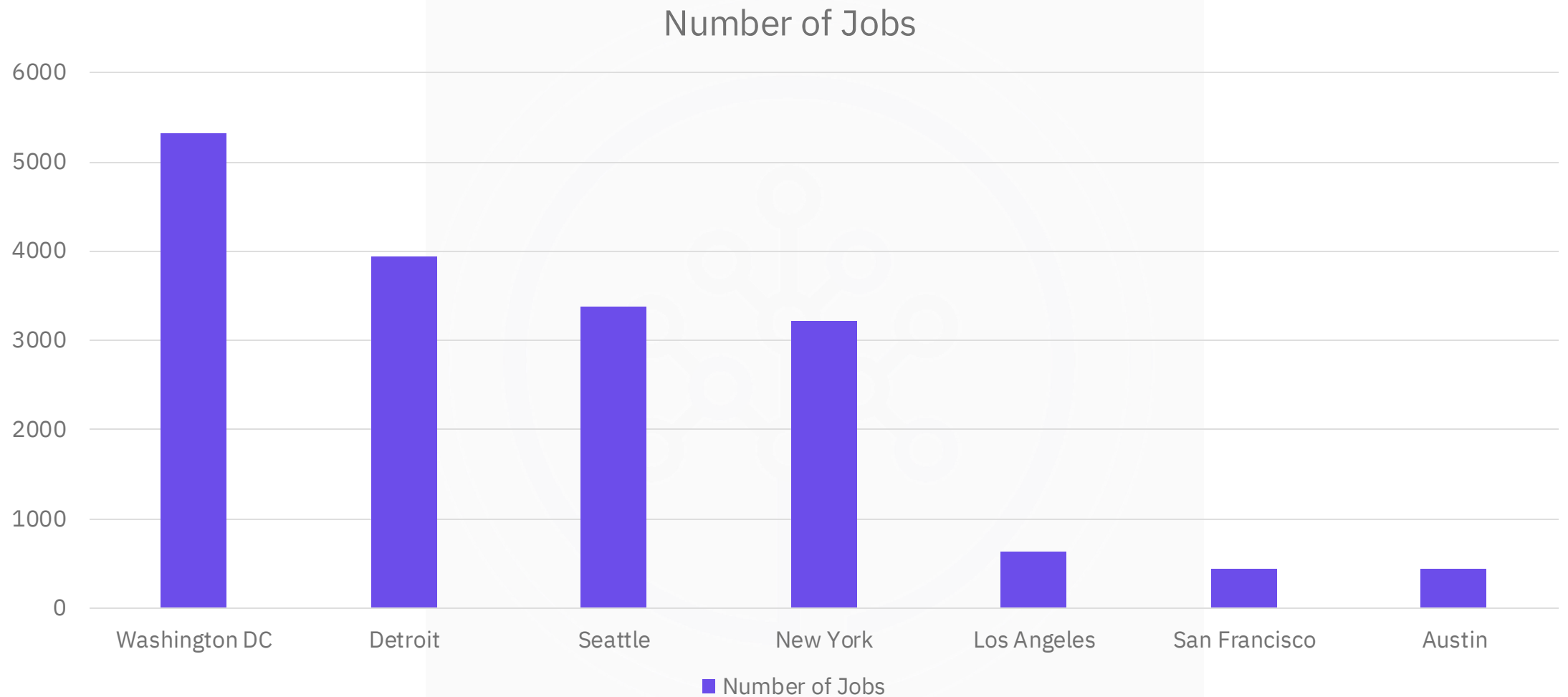


# APPENDIX

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# JOB POSTINGS



# POPULAR LANGUAGES

