



# Technology Trends & Analysis Presentation

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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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- Technology current trend:
  - Database
  - Language
  - Platform
  - Web framework
- Demographics Survey
- Future Technology trend
- Country and Gender Gap

# INTRODUCTION

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- Analyzing technology trends around the world
- Purpose of this Analysis:
  - Identify the top programming languages, database, platform, web framework
  - Identify skill requirements for future
  - Identify top skills in demand
  - Identify demographics survey gap
- Target Audience:
  - Computer science students
  - IT industry and HR leaders

# METHODOLOGY

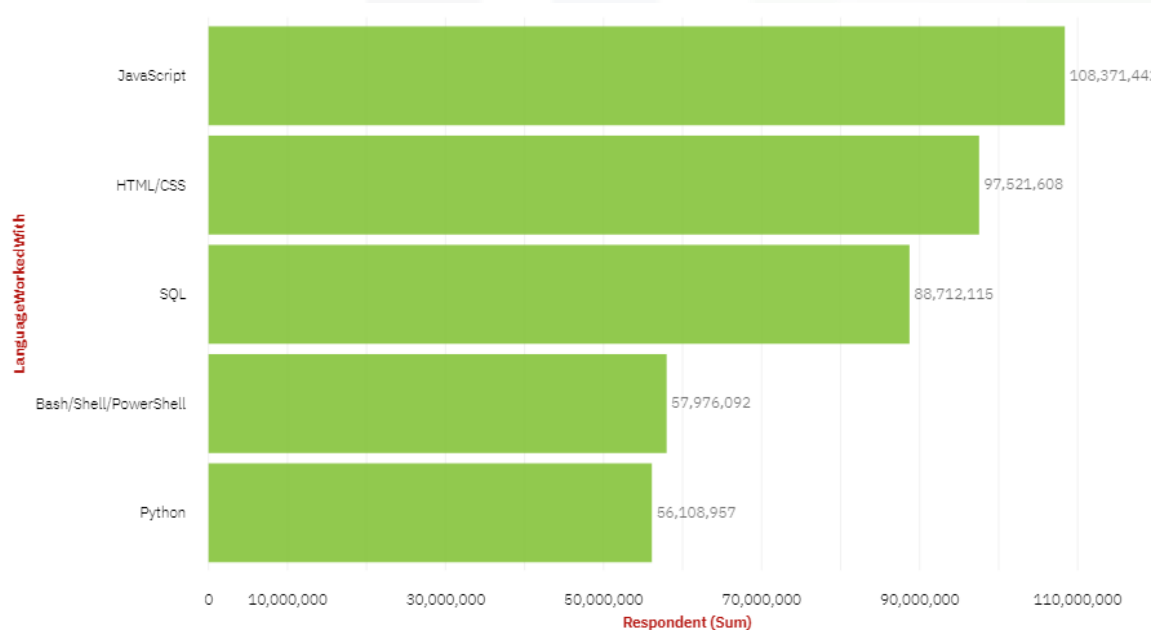
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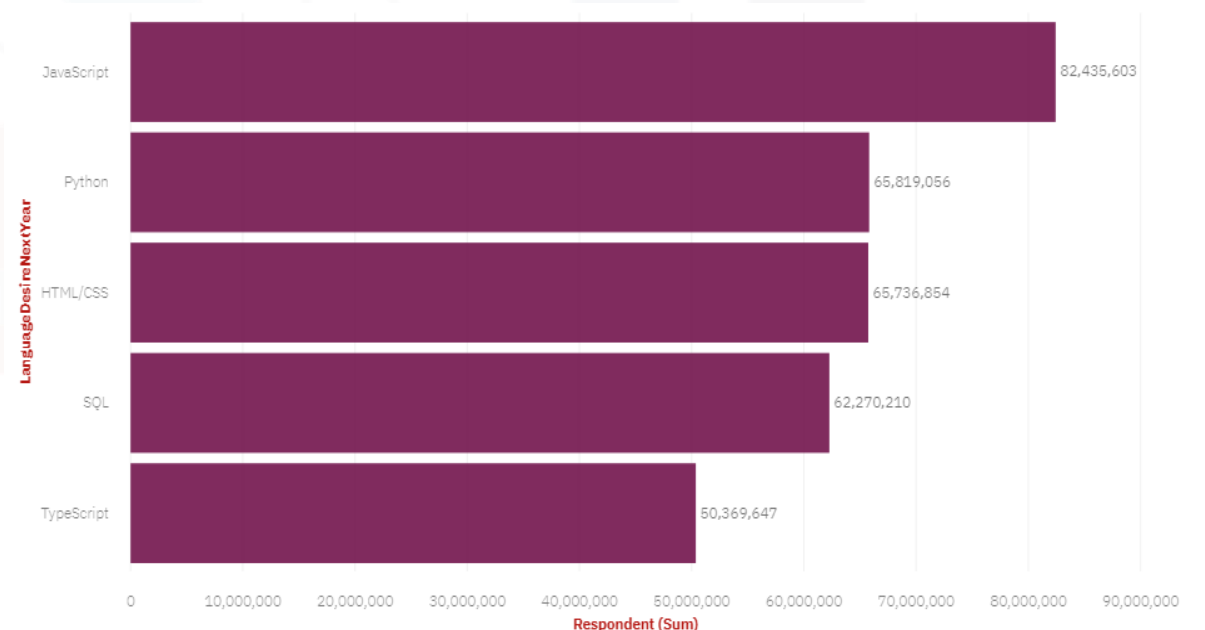
- Data Sources:
  - Stack Overflow Developers Survey
  - Programming Language Annual Salary
  - Github Job Posting
- Data Wrangling
- Data Exploration and Cleaning
- Data Visualization:
  - IBM Cognos Analytics
- Presentation

# PROGRAMMING LANGUAGE TRENDS

## Top 5 Current Year



## Top 5 Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

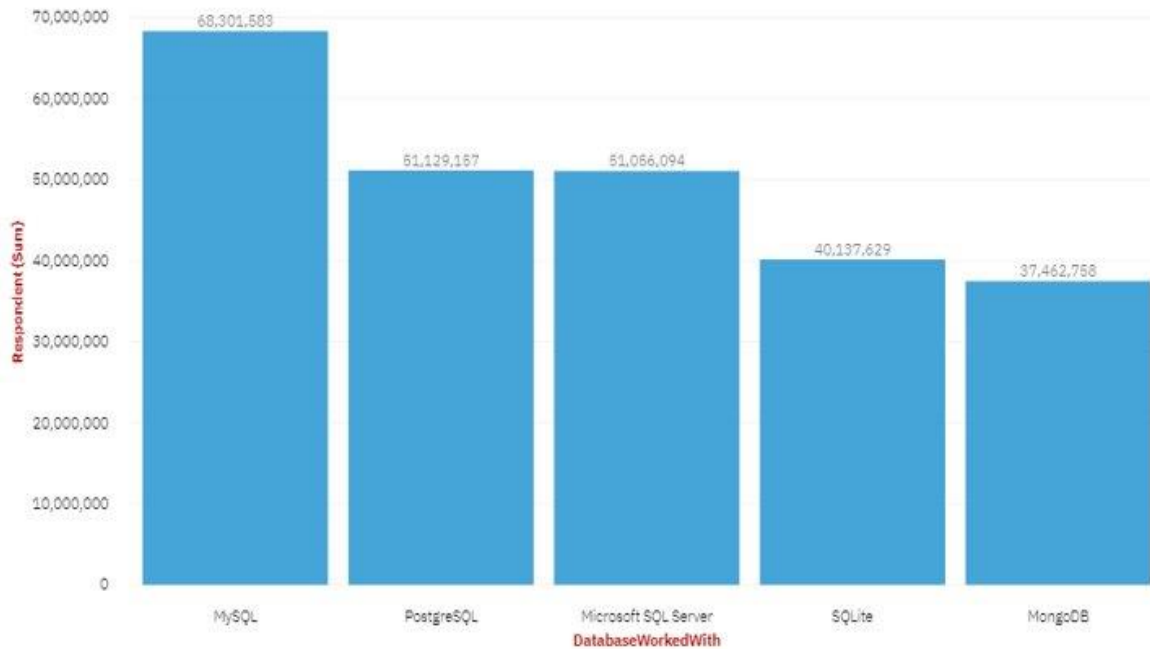
- JavaScript is the most in demand programming language.
- Python, HTML/CSS, and SQL are other in demand programming languages.
- JavaScript, HTML/CSS and SQL are top 3 in current year.
- Skills in TypeScript is more desirable than Bash/Shell/PowerShell for next year.

## Implications

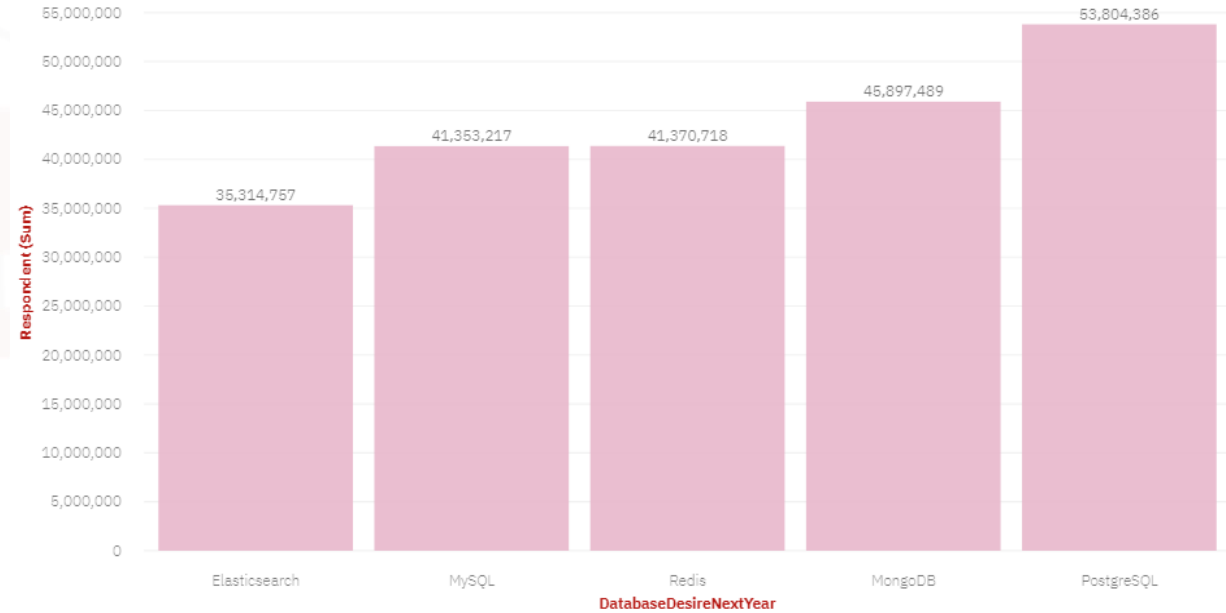
- Python's increase in demand may overtake JavaScript in the future.
- JavaScript, Python, HTML/CSS, and SQL are consistently in demand.
- Web development remains in high demand.

# DATABASE TRENDS

Current Year



Next Year





# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- Most popular - MySQL
- PostgreSQL and MongoDB have an increase in demand.
- MongoDB and Redis getting more popular.

## Implications

- MySQL has a decrease in demand for next year.
- Open-source databases are still more in demand.
- PostgreSQL and MongoDB are the most consistent in demand databases

# DASHBOARD

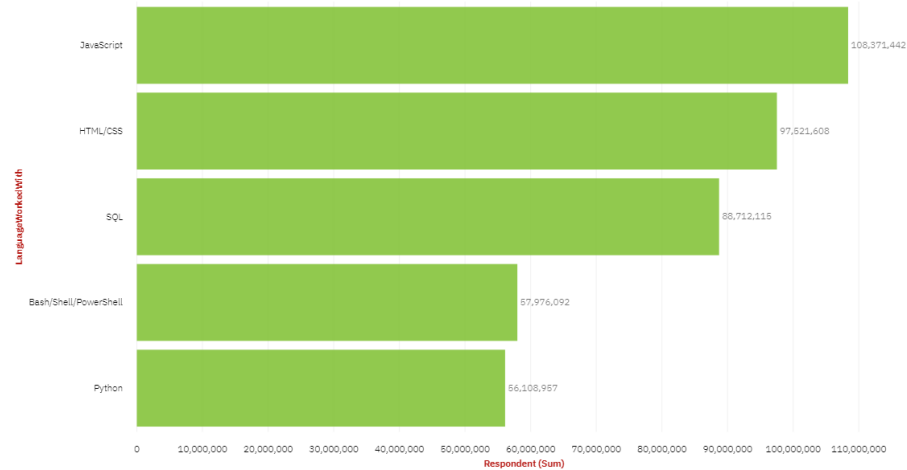
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# DASHBOARD TAB 1

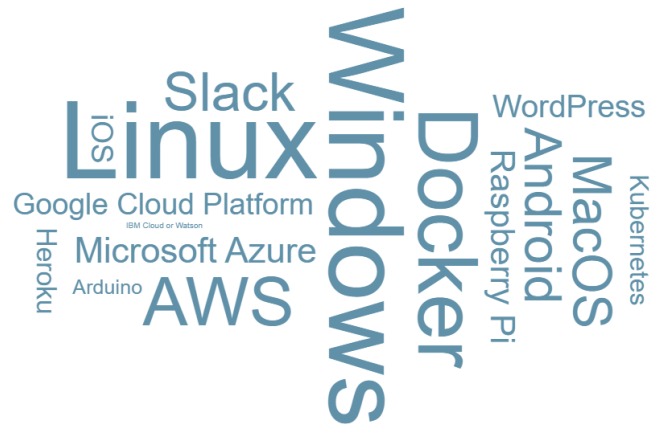
Top 5 Language for current year



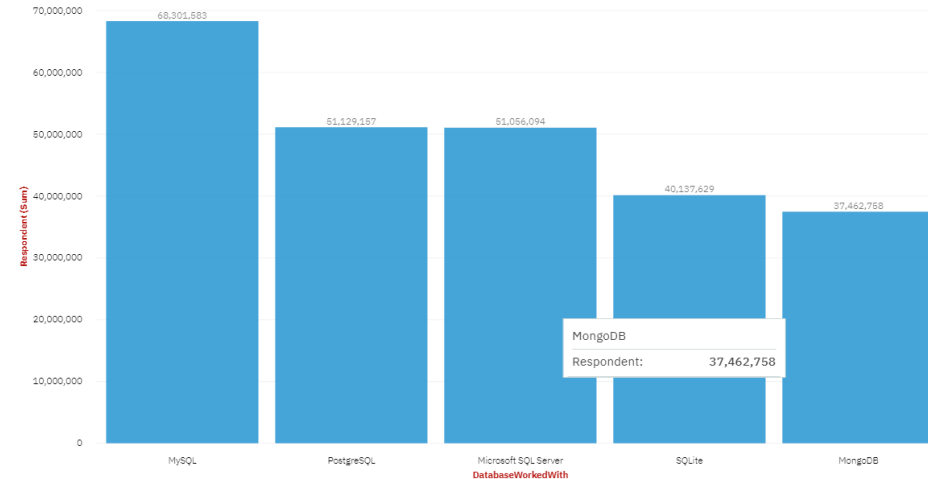
Respondent (Sum)

2,532,293 72,655,619

Platform worked with



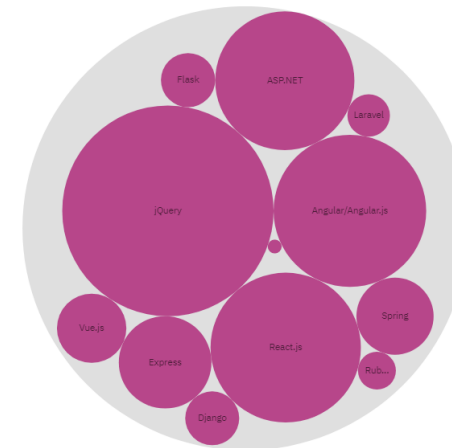
Top 5 Database worked with



Respondent (Sum)

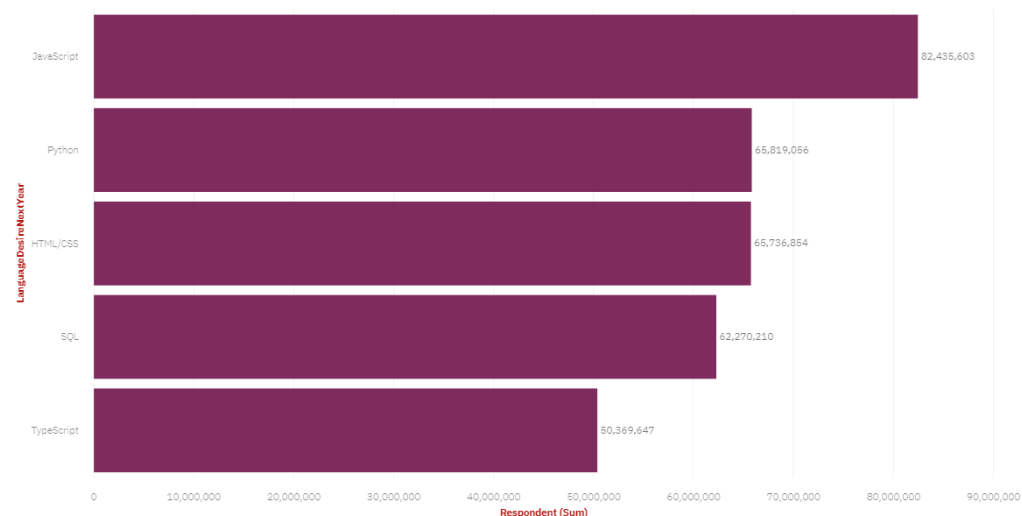
3,748,592 67,310,840

Top 10 Web Framework with

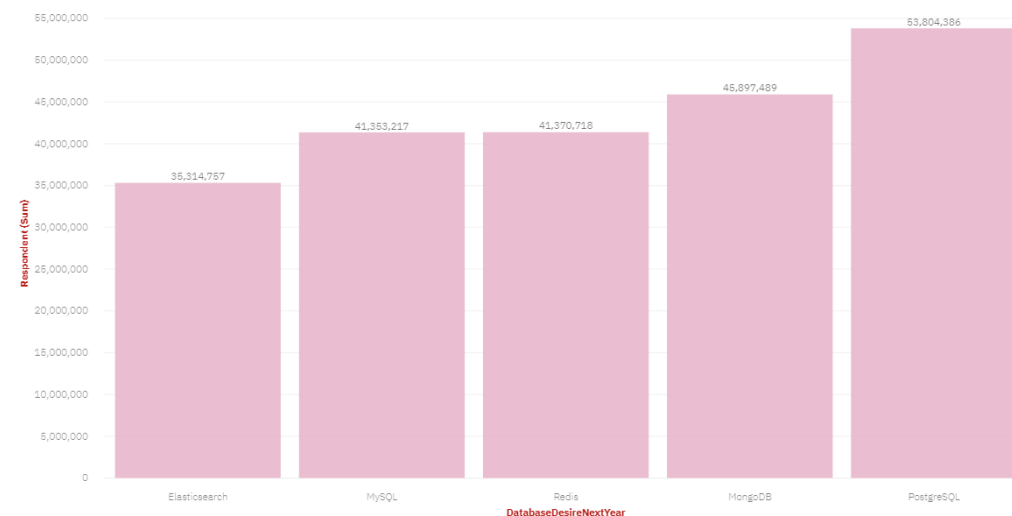


# DASHBOARD TAB 2

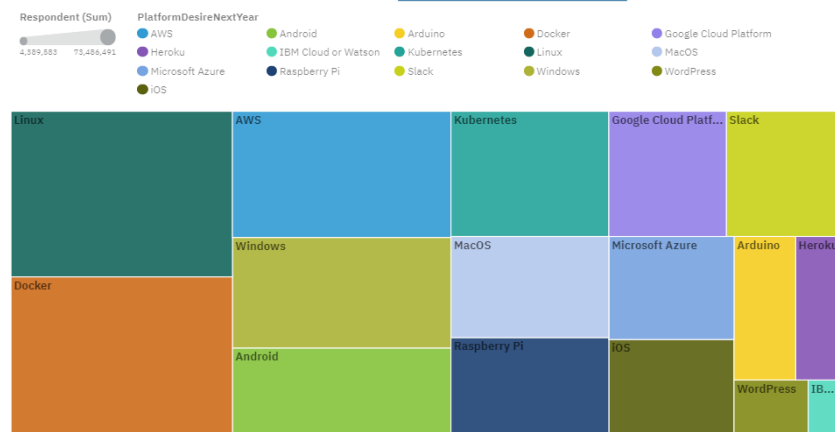
Top 5 Language Desire Next Year



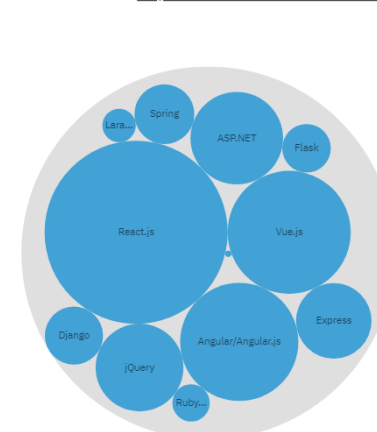
Top 5 Database Desire Next Year



Platform Desire Next Year



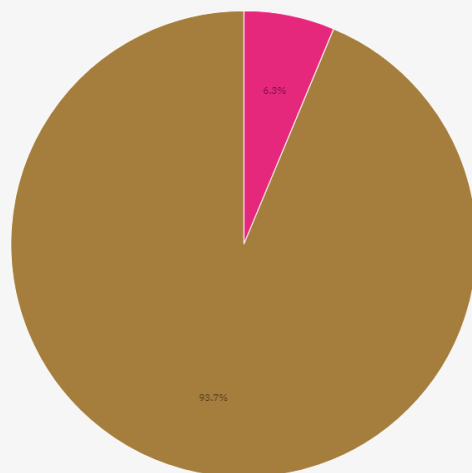
Top 10 Web Frame Desire Next Year



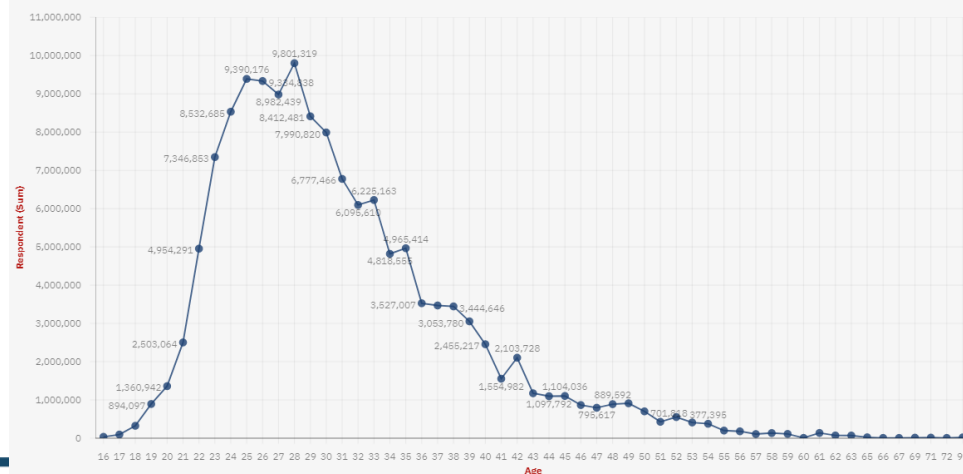
# DASHBOARD TAB 3

Respondent by Gender

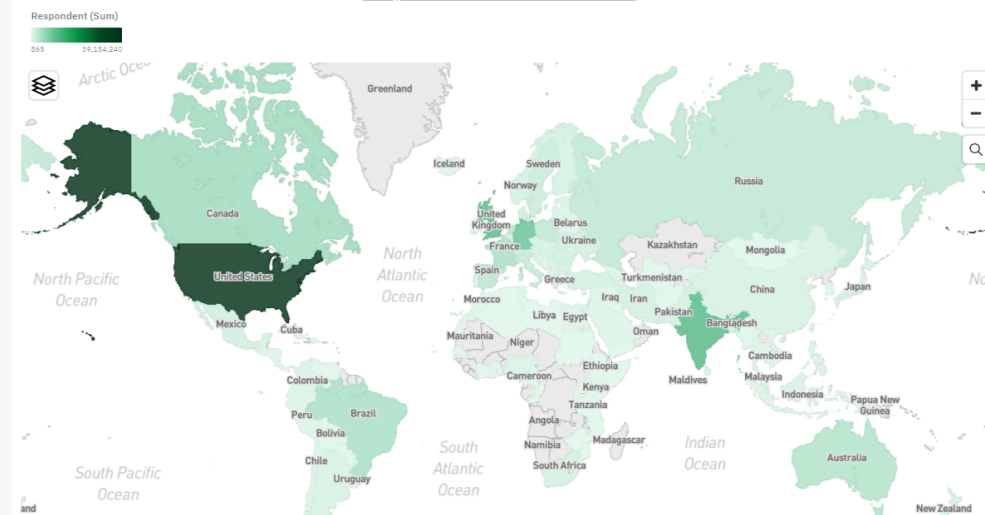
Gender  
Woman Man



Respondent count by age



Respondent Count for Countries



Respondent count by Formal Education, Gender



# DISCUSSION

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- Technology Trends now and in the future
- Technology gaps in developing countries
- Reskilling and training workers
- New technology constantly emerges leading to changes in demand.

# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- JavaScript and Python are the most popular programming languages.
- PostgreSQL is the most popular database.
- Gender gap in the IT field.
- Trends and demands fluctuate based on new technologies and change every year.
- Most people working with technology has Bachelor degree

## Implications

- Adjusting to rapid changes.
- Having skills that are high in demand leads to more job opportunities.
- IT professionals and companies have to learn and adapt to new demands.
- Gender gap will affect job hiring trend.

# CONCLUSION

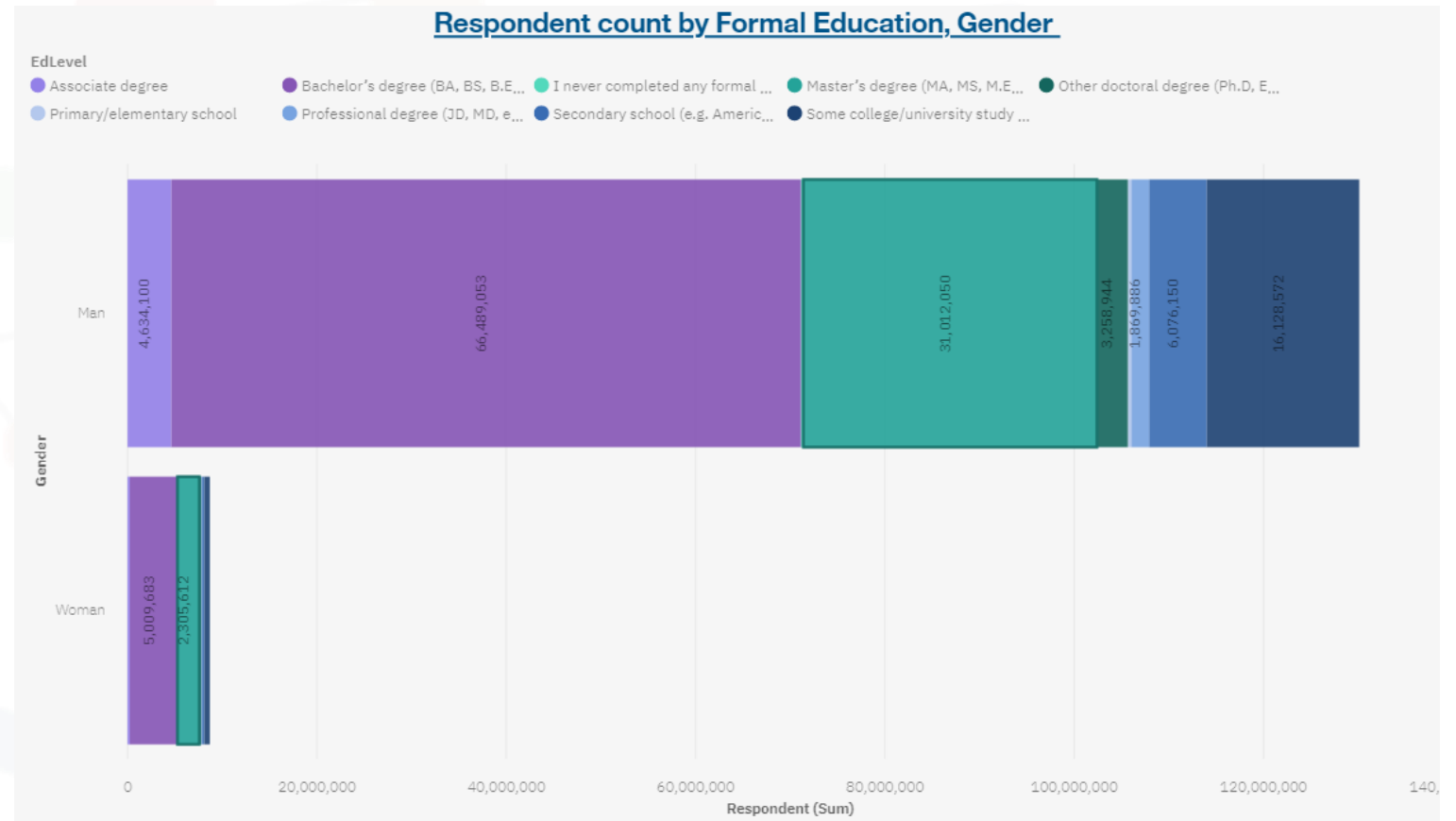
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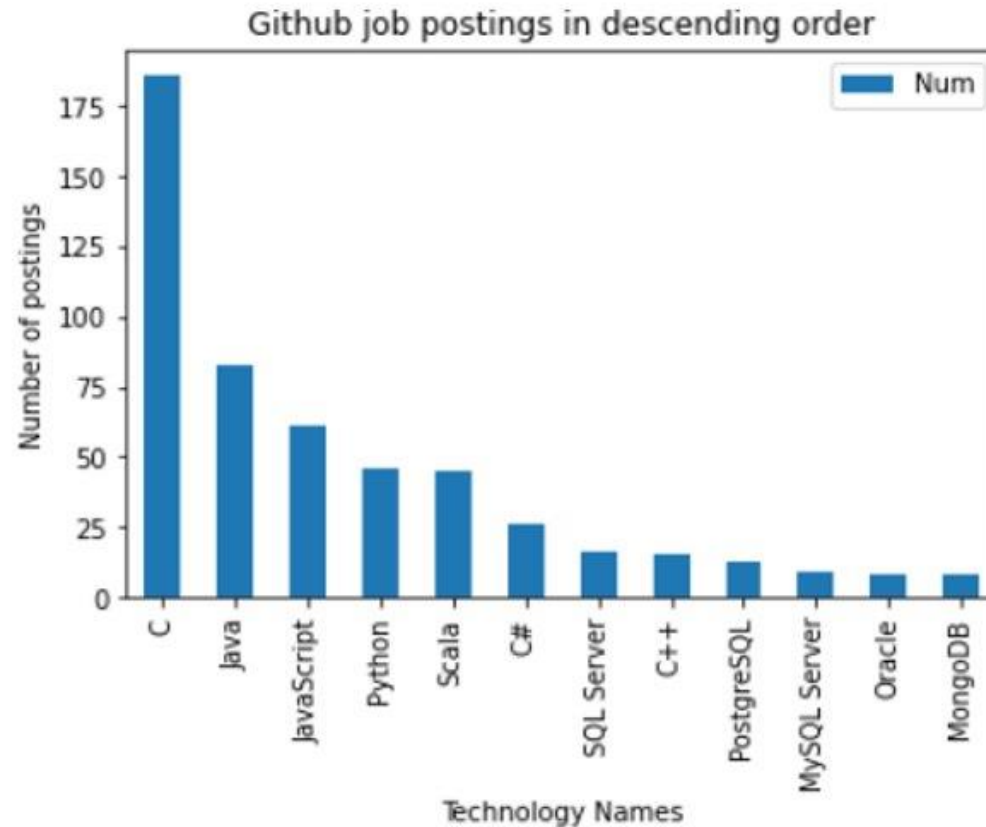
- New technology leads to different trends and demands.
- JavaScript and Python are the most popular programming languages.
- PostgreSQL is the most popular database.
- The IT industry needs to diversify.



# APPENDIX



# GITHUB JOB POSTINGS



# POPULAR LANGUAGES

