



Presentation on Current and Future Technology Trends and Analysis

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OUTLINE



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

EXECUTIVE SUMMARY



- Current shifts and popularities in programming languages and databases
- Survey exploring the demographics of various populations
- The disparity in technological advancement among different countries
- The disparity in job opportunities and roles between genders

INTRODUCTION



- Subject: Examination of Current Trends in Software Development

- Objective: To Determine Future Skill Needs Key Questions:

Which programming languages are currently most sought-after?

What are the most in-demand database skills?

What integrated development environments (IDEs) are widely used?

- Target Readers: Human Resources and Information Technology Leaders

METHODOLOGY



- **Data Collection Sources**

Stack Overflow Developer 2019 Survey

GitHub Job Postings

Programming Languages Annual Salary

- **Data Exploration**

- **Data Cleaning**

- **Data Visualization**

- **Presentation**

RESULTS

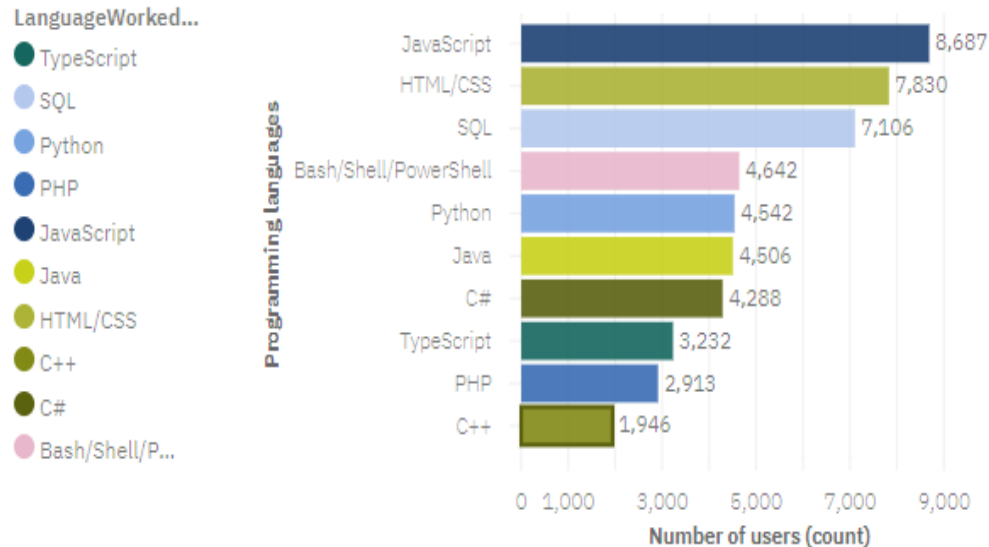
	Respondent...	LanguageWorkedWith	LanguageDesireNextYear	DatabaseWorkedWith	DatabaseDesireNextYear
1.	25142	R			
2.	25142	Python			
3.	25142	C	C		
4.	25142	Go	Python		
5.	25142	C++	C++		
6.	25142	HTML/CSS	R		
7.	25142	PHP			
8.	25142	Bash/Shell/PowerShell	Bash/Shell/PowerShell	PostgreSQL	PostgreSQL
9.	25141	C#	F#		Microsoft SQL Server
10.	25141	JavaScript			
11.	25141	TypeScript			
12.	25141	HTML/CSS			Redis
13.	25141	Java			
14.	25141	Python			
15.	25141	SQL			

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PROGRAMMING LANGUAGE TRENDS

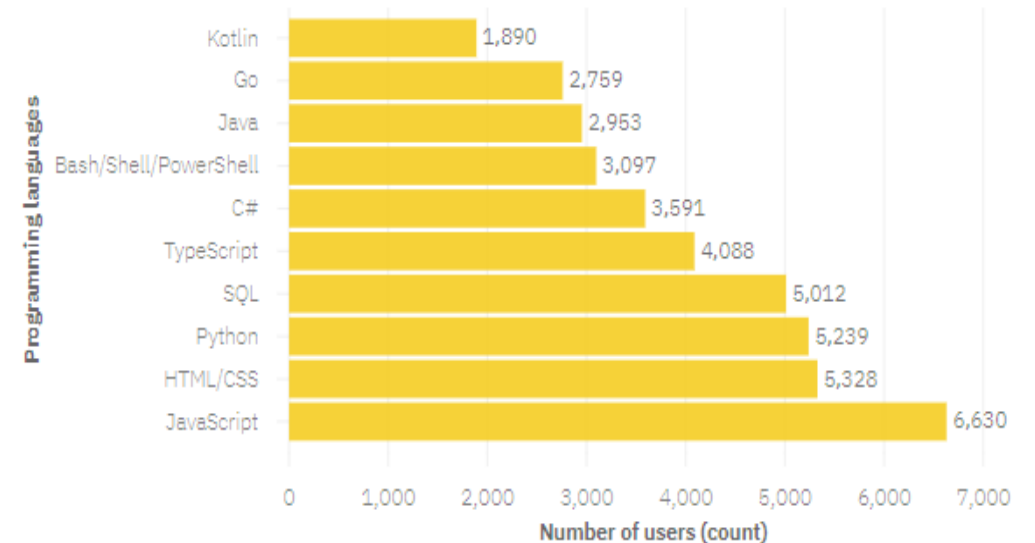
Current Year

Top 10 Languages Worked With



Next Year

Top 10 Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- This year, the top three technologies are JavaScript, HTML/CSS, and SQL.
- Python and TypeScript are gaining popularity for the upcoming year.
- PowerShell is expected to be less prominent next year.

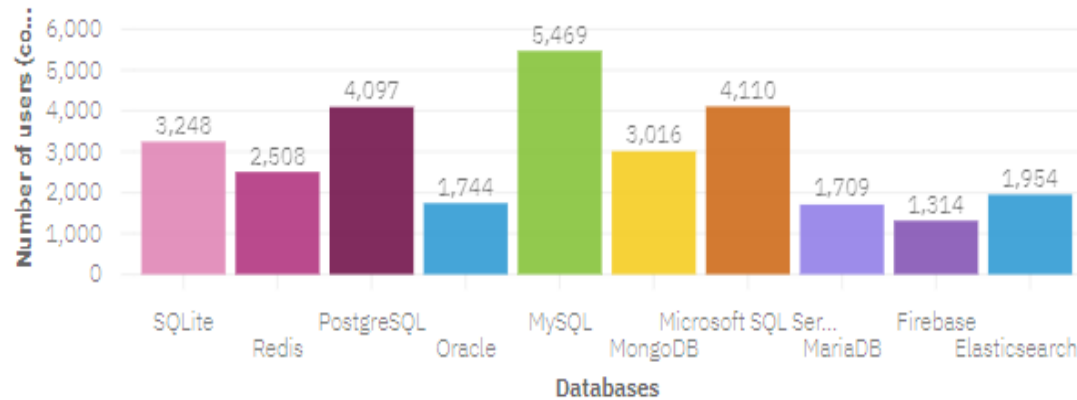
Implications

- Web development continues to be highly sought after.
- For Big Data applications in businesses, SQL remains essential.
- Given the growing need for AI and ML, Python emerges as the optimal choice.

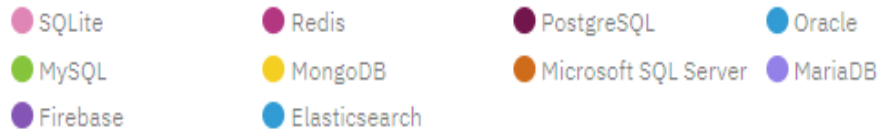
DATABASE TRENDS

Current Year

Top 10 Databases Worked With

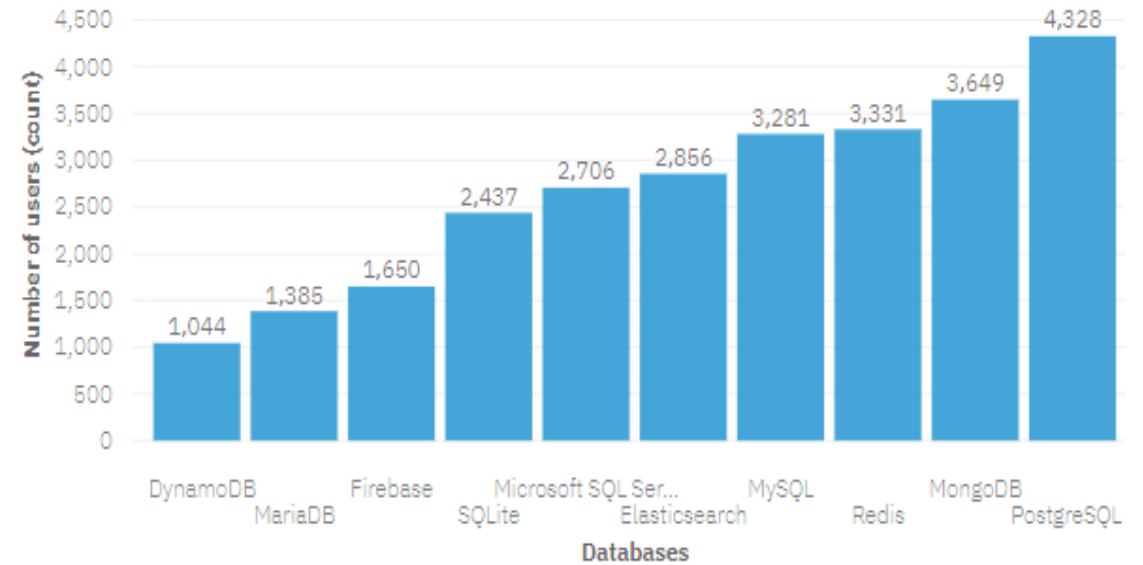


DatabaseWorkedWith



Next Year

Top 10 Database Desire Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL remains the leader in popularity.
- Microsoft SQL follows closely behind.
- MongoDB and Redis are emerging as new favorites.
- Elasticsearch is the latest trending addition.

Implications

- Companies continue to favor open-source databases.
- NoSQL databases are becoming influential for storing non-relational data.
- Redis excels in handling abstract data types.
- Pre-configured search options are available for websites, apps, and e-commerce platforms.

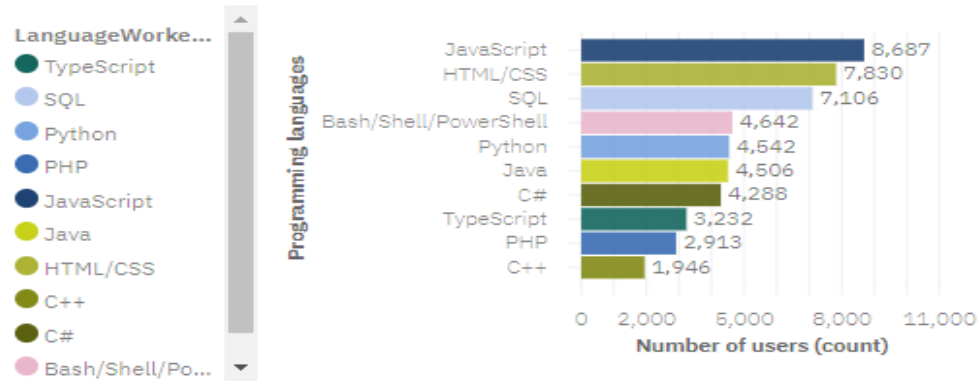
DASHBOARD



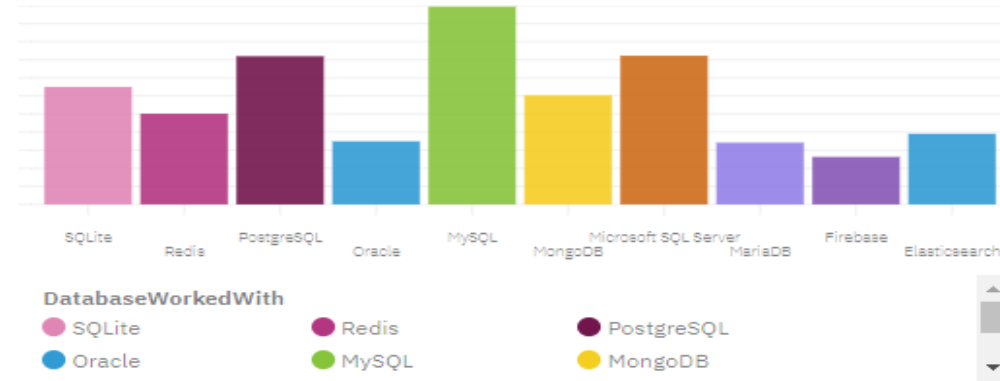
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DASHBOARD TAB 1

Top 10 Languages Worked With



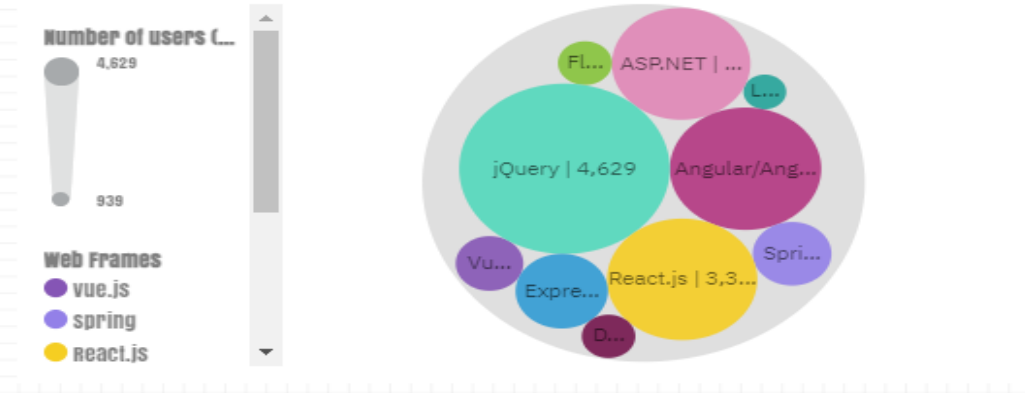
Top 10 Databases Worked With



Platforms Worked With



Top 10 Web Frames Worked With



DASHBOARD TAB 2

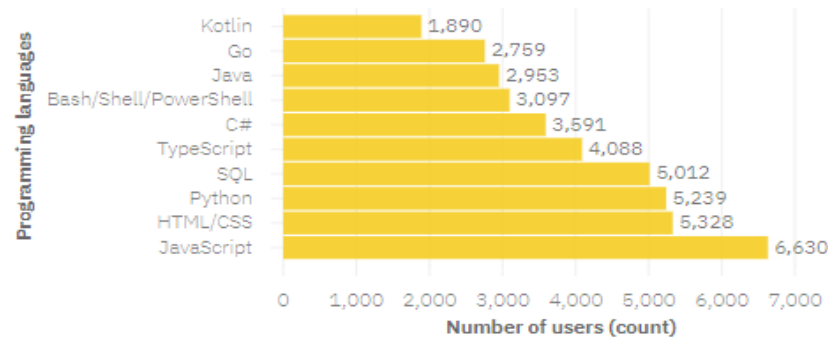
Current Technology Usage

Future Technology Trend

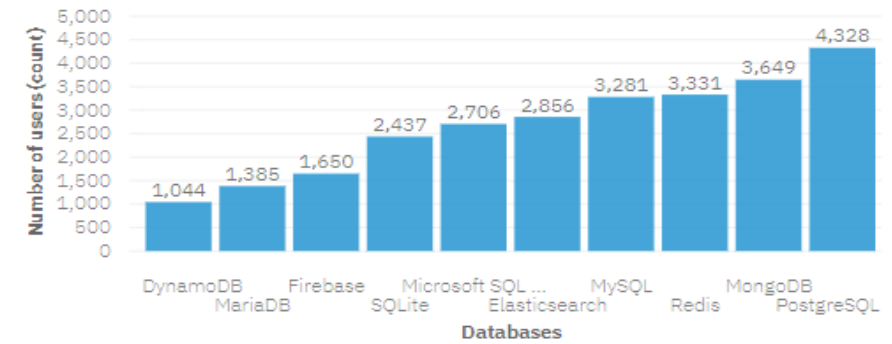
Demographics



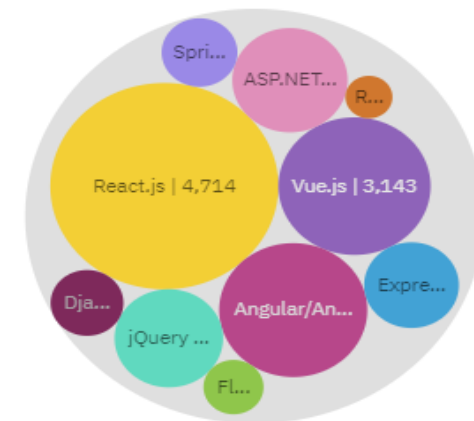
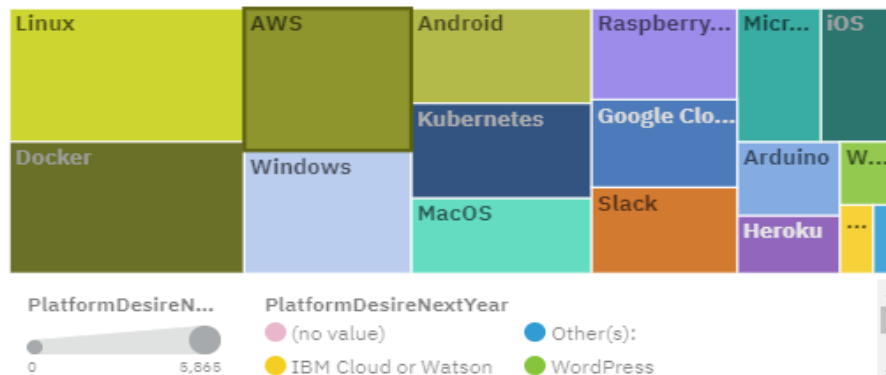
Top 10 LanguageDesireNextYear



Top 10 DatabaseDesireNextYear

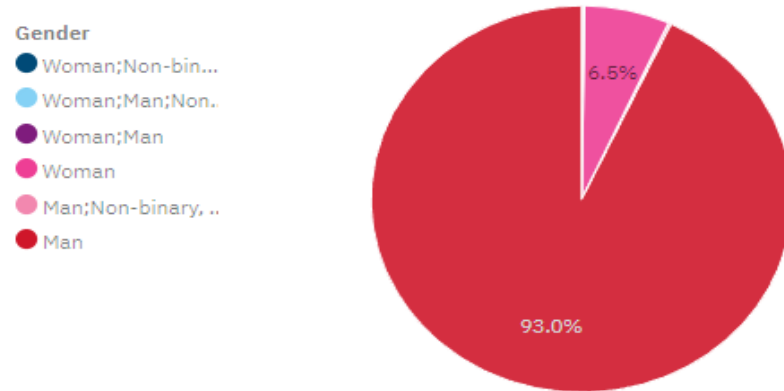


PlatformDesireNextYear

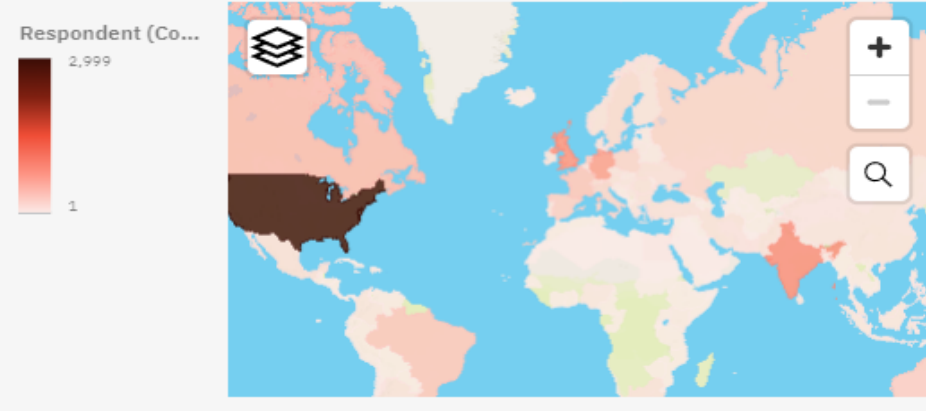


DASHBOARD TAB 3

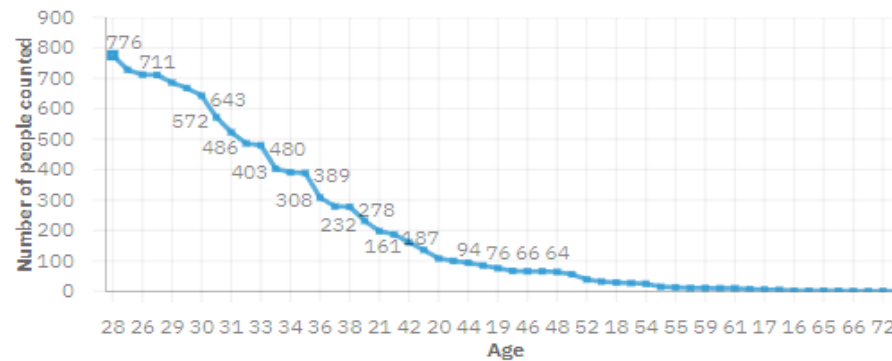
Respondents classified by Gender



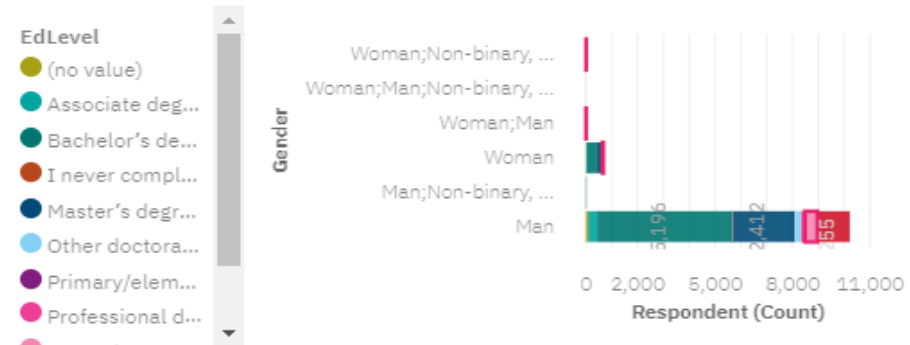
Respondent Count by Country



Respondent count by age



Respondent Count by Gender, classified by Formal Education Level



DISCUSSION



- Current and Future Technological Trends
- Enhancing Employee Skills through Training and Reskilling
- Increasing Female Involvement in the Tech Sector
- Addressing Technological Disparities in Developing Nations
- Eliminate age and education discrimination in employment

OVERALL FINDINGS & IMPLICATIONS

Findings

- Rapid Evolution of Technology Annually
- Focus on Key Countries such as the USA and India
- Disparities in Gender Representation and AWS are sensations in Tech Roles
- Platforms like Docker growing

Implications

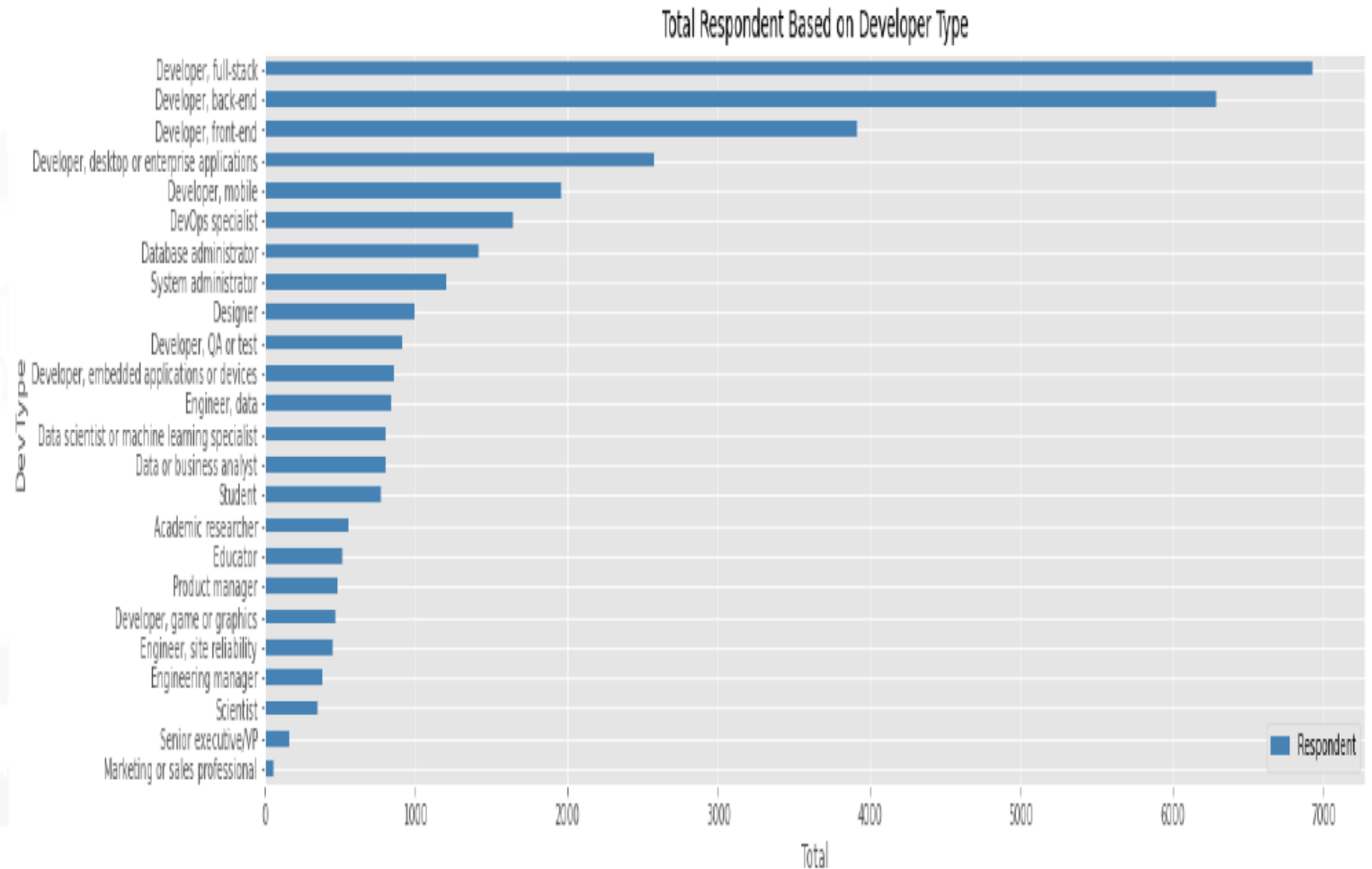
- Businesses must adapt quickly to fast-paced technological changes.
- There's a necessity to extend technological advancements to countries falling behind.
- Influences on recruitment processes.
- A future trend towards swifter application deployments and increased reliance on cloud services.

CONCLUSION

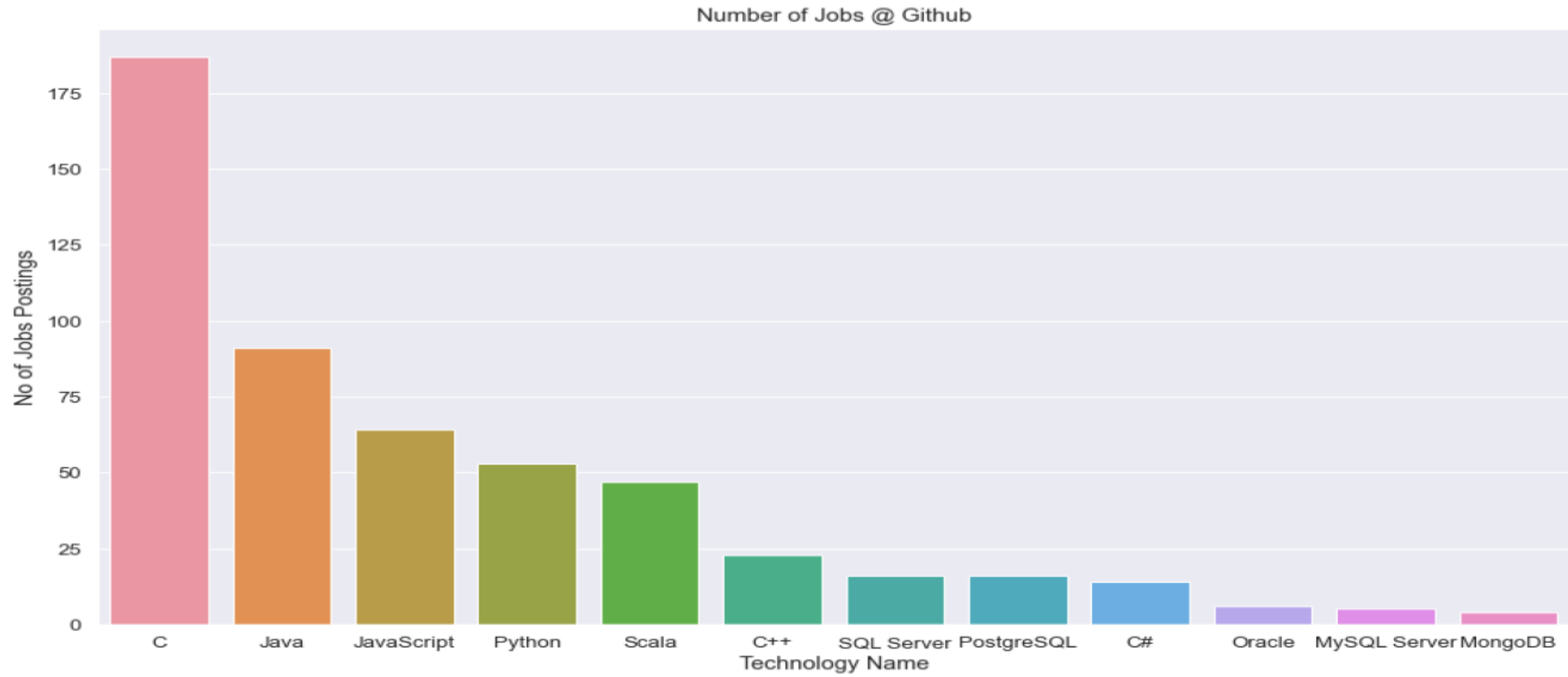


- Technological Trends for This Year and the Next
- Overview of Programming Languages, Databases, and Platforms
- Analysis of Demographic Data
- Recommended Strategic Actions
- Future Integration of Machine Learning for Trend and Salary Predictions

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

