



TECHNOLOGY ANALYSIS

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OUTLINE



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- Introduction
- Methodology
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- Discussion
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EXECUTIVE SUMMARY



- Current Technology Usage Trend
- Future Technology Usage Trend
- Demographics Technology Usage Trend

INTRODUCTION



- Knowing which programming languages, databases, platforms, and web frameworks are most popular right now is important to stay up-to-date and competitive in the tech field.
- The purpose is to identify future skill requirements, anticipate tech industry trends, and address talent gaps to guide workforce needs.

METHODOLOGY



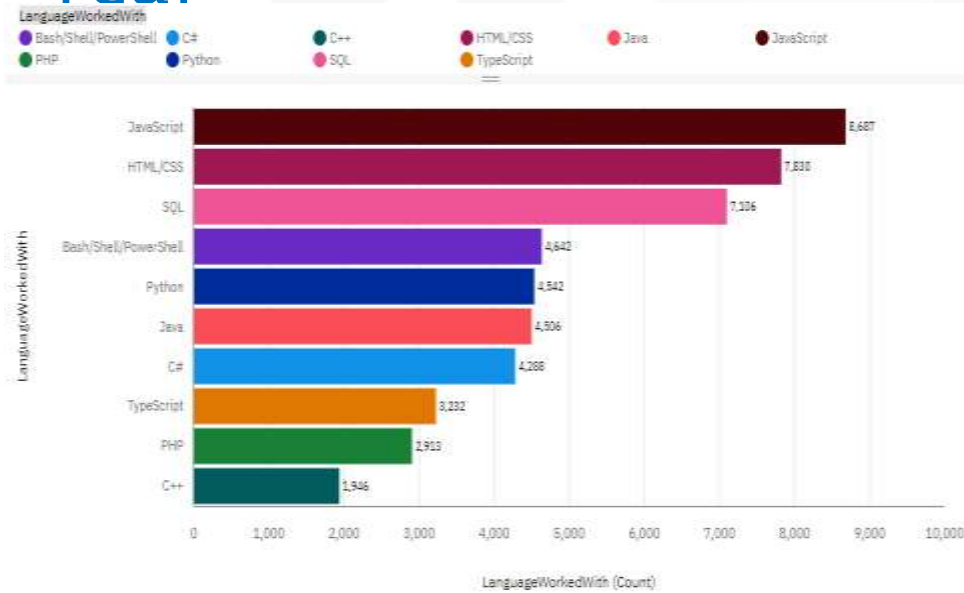
- Data Collection
- Data Wrangling
- Data Exploration
- Data Cleaning
- Data Visualization

RESULTS

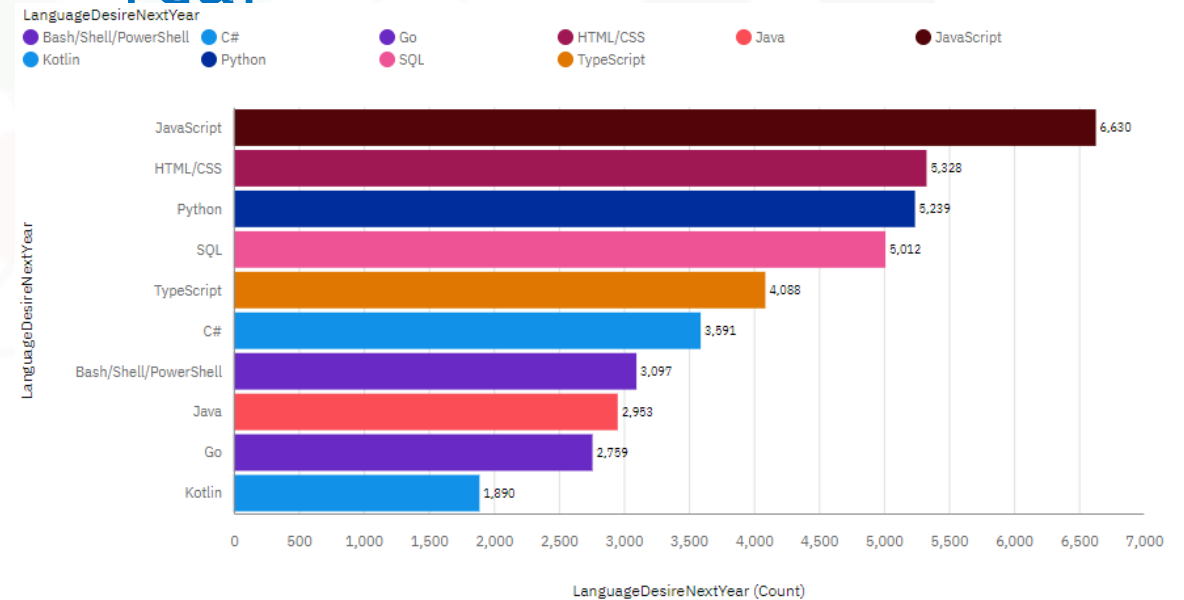
Respondent	LanguageWorkedWith	LanguageDe...eNextYear	DatabaseWorkedWith	DatabaseDe...eNextYear	PlatformWorkedWith	PlatformDesireNextYear	WebFrameWorkedWith	WebFrameD...eNextYear	DevEnviron
50	C	JavaScript	Firebase	PostgreSQL	AWS	Docker	Express	Flask	Visual Studio Code
50	C++	Python	MariaDB	Redis	Heroku	Heroku	Flask	jQuery	Null
50	HTML/CSS	Null	MongoDB	Other(s):	Linux	Kubernetes	jQuery	React.js	Null
50	Java	Null	MySQL	Null	MacOS	Linux	Null	Vue.js	Null
50	JavaScript	Null	Oracle	Null	Raspberry Pi	MacOS	Null	Null	Null
50	PHP	Null	SQLite	Null	WordPress	WordPress	Null	Null	Null
50	Python	Null	Other(s):	Null	Null	Null	Null	Null	Null
50	SQL	Null	Null	Null	Null	Null	Null	Null	Null
53	Bash/Shell/PowerShell	Bash/Shell/PowerShell	DynamoDB	DynamoDB	AWS	AWS	Angular/Angular.js	Angular/Angular.js	IntelliJ
53	HTML/CSS	HTML/CSS	MySQL	MySQL	Docker	Docker	Spring	Spring	Visual Studio Code
53	Java	Java	Oracle	PostgreSQL	Null	Null	Null	Null	Null
53	JavaScript	JavaScript	Redis	Redis	Null	Null	Null	Null	Null
53	PHP	SQL	Null	Null	Null	Null	Null	Null	Null
53	SQL	TypeScript	Null	Null	Null	Null	Null	Null	Null

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS – FINDINGS & IMPLICATIONS

Findings

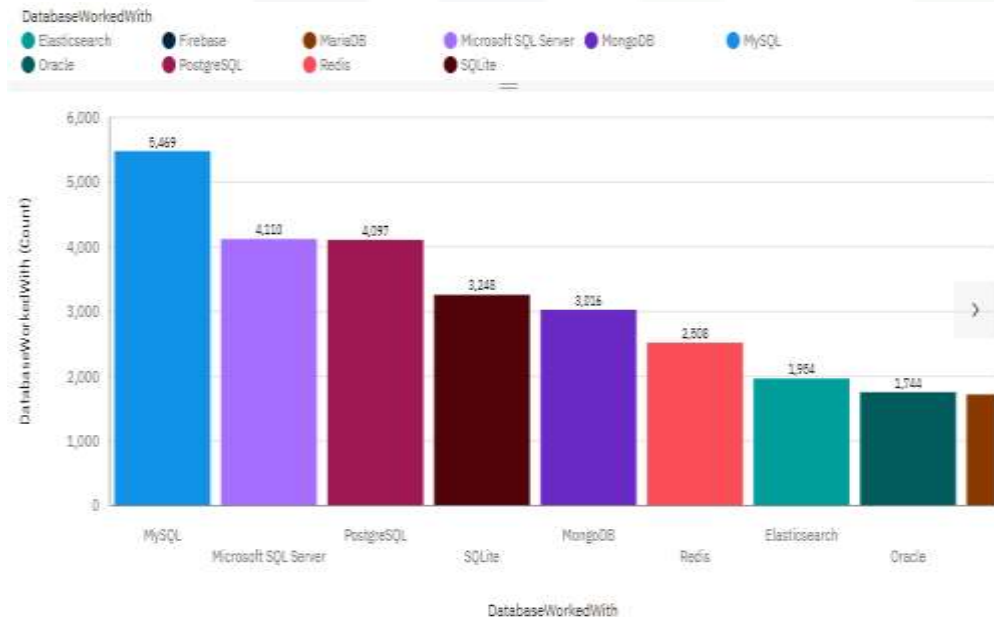
- JavaScript is Most Trending Language
- Python and Typescript are becoming Most popular Language in Future
- HTML/CSS is Second Most Popular Language.

Implications

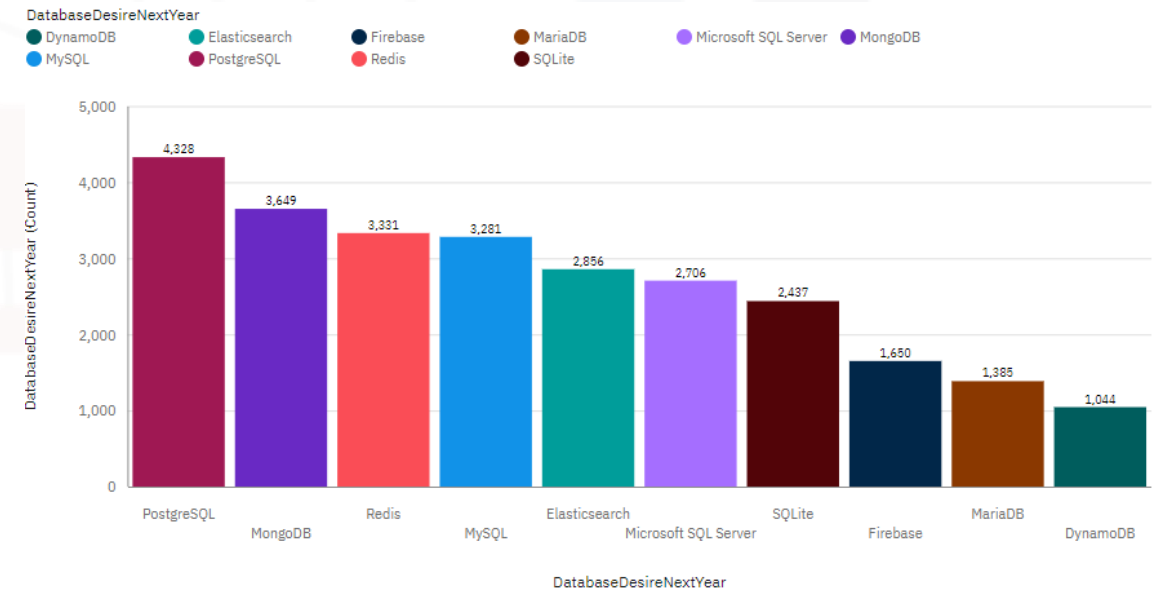
- Python has become the leading language, especially popular in AI
- Web Development is in High Demand
- JavaScript, SQL, and Typescript are Most Popular Language

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS – FINDINGS & IMPLICATIONS

Findings

- Most Popular Data Base is Mysql
- Microsoft SQL Server second most popular DataBase
- Finding 3

Implications

- PostgreSQL is Leading DataBase in Future

DASHBOARD



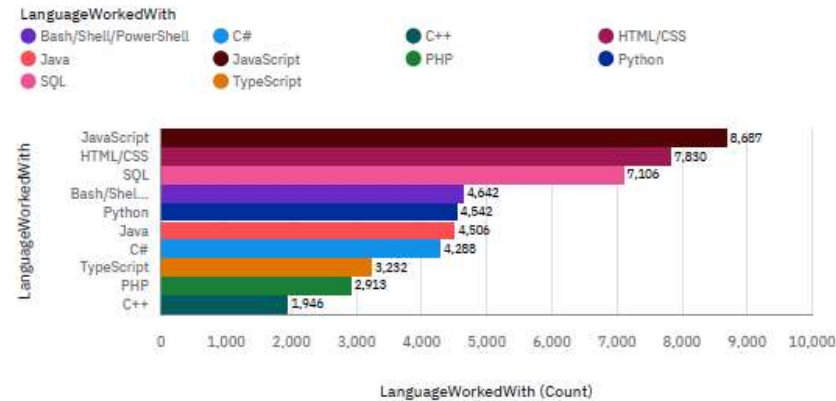
GIT HUB LINK

<https://github.com/wickramanet/Cognos-DashBoard>

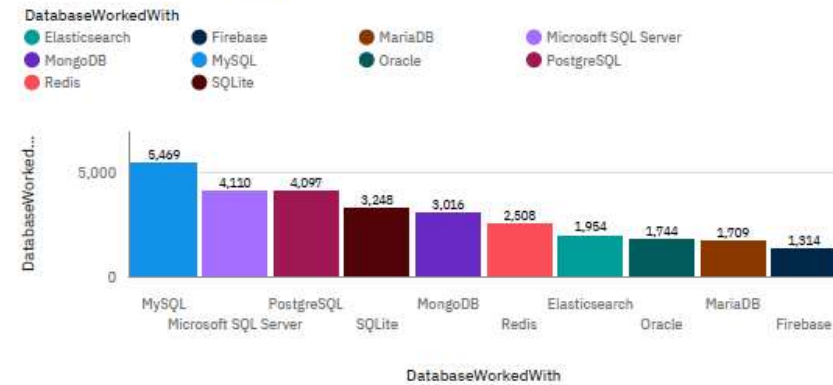
DASHBOARD TAB 1

Current Technology Usage

Top 10 LanguageWorkedWith



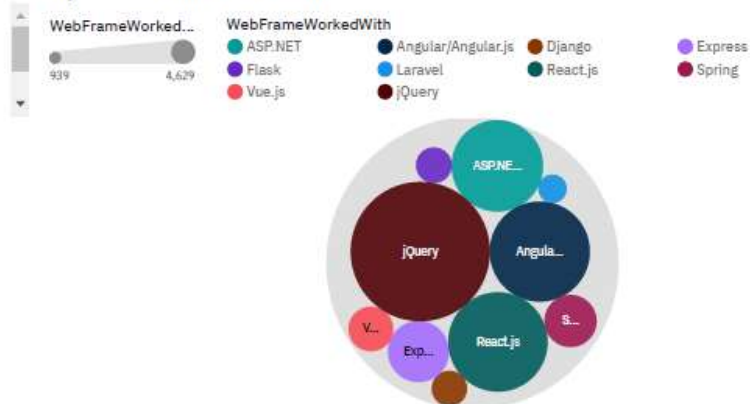
Top 10 DatabaseWorkedWith



PlatformWorkedWith



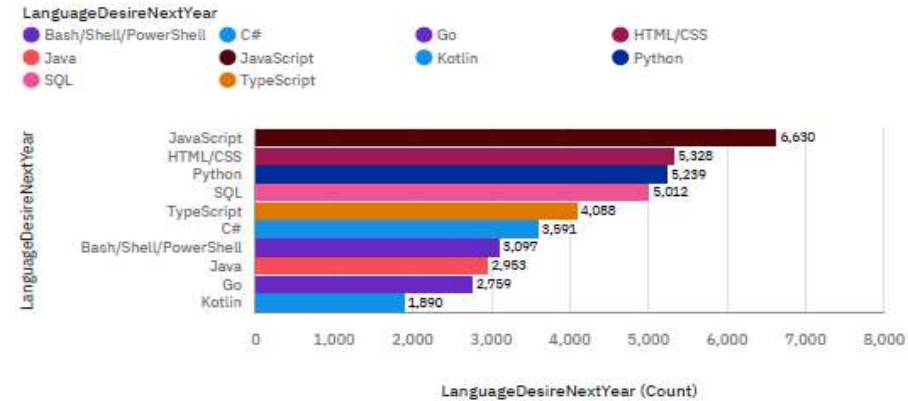
Top 10 WebFrameWorkedWith



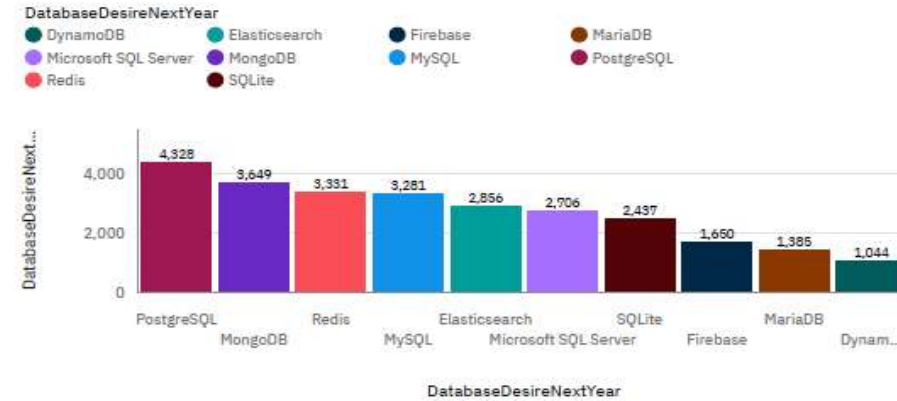
DASHBOARD TAB 2

Future Technology Trend

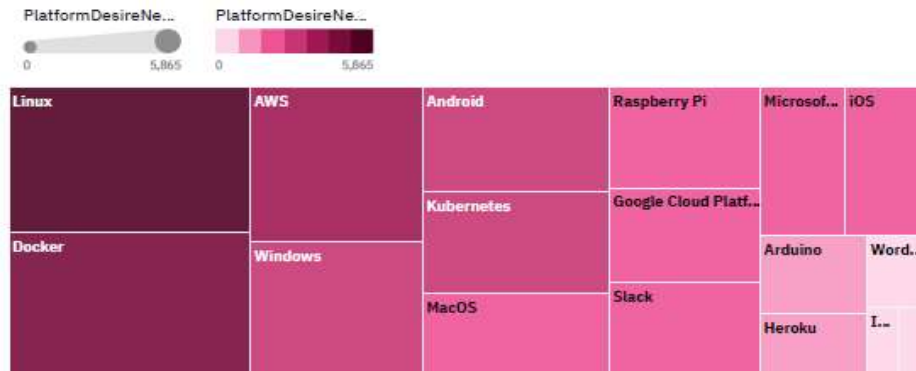
Top 10 LanguageDesireNextYear



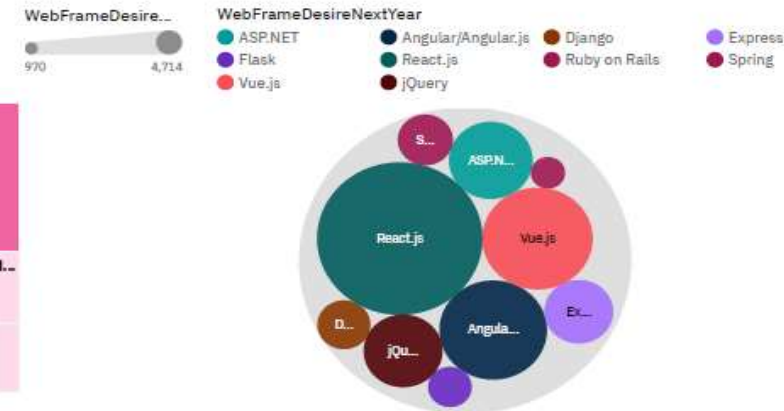
Top 10 DatabaseDesireNextYear



PlatformDesireNextYear



Top 10 WebFrameDesireNextYear

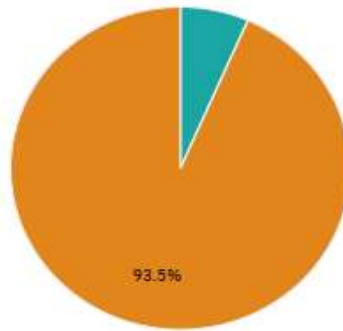


DASHBOARD TAB 3

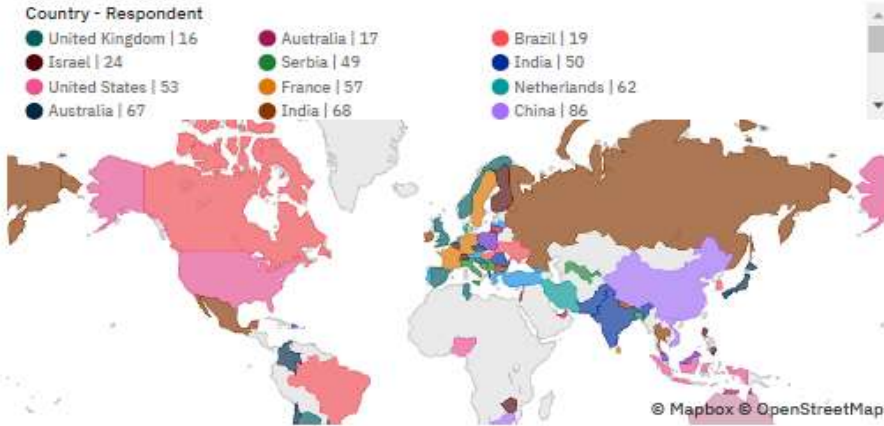
Demographics

Respondent classified by Gender

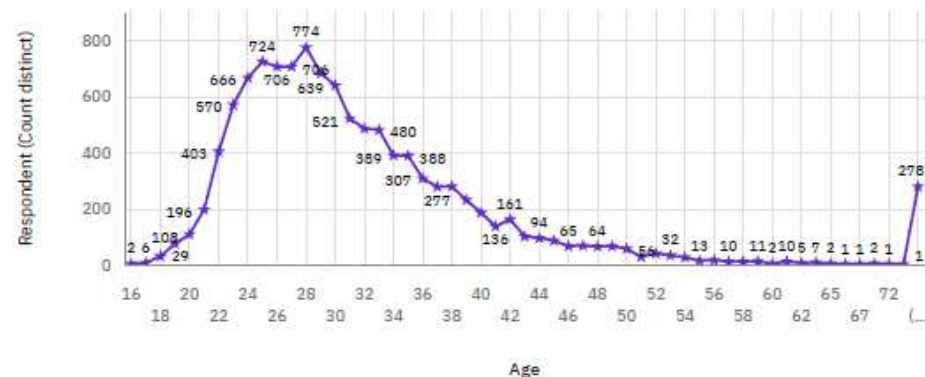
Gender
● Woman ● Man



Respondent Count for Countries



Respondent Count by Age



Respondent Count by Gender, classified by Formal Education Level



DISCUSSION



- Current and Future Technology trends
- Increasing female participation in technology.
- Addressing age and education discrimination in tech jobs.
- Closing technology gaps in developing countries.

OVERALL FINDINGS & IMPLICATIONS

Findings

- There is a significant gender gap and age discrimination in technology jobs
- Docker and AWS are among the most popular platforms.
- The USA and India are among the leading technology hubs

Implications

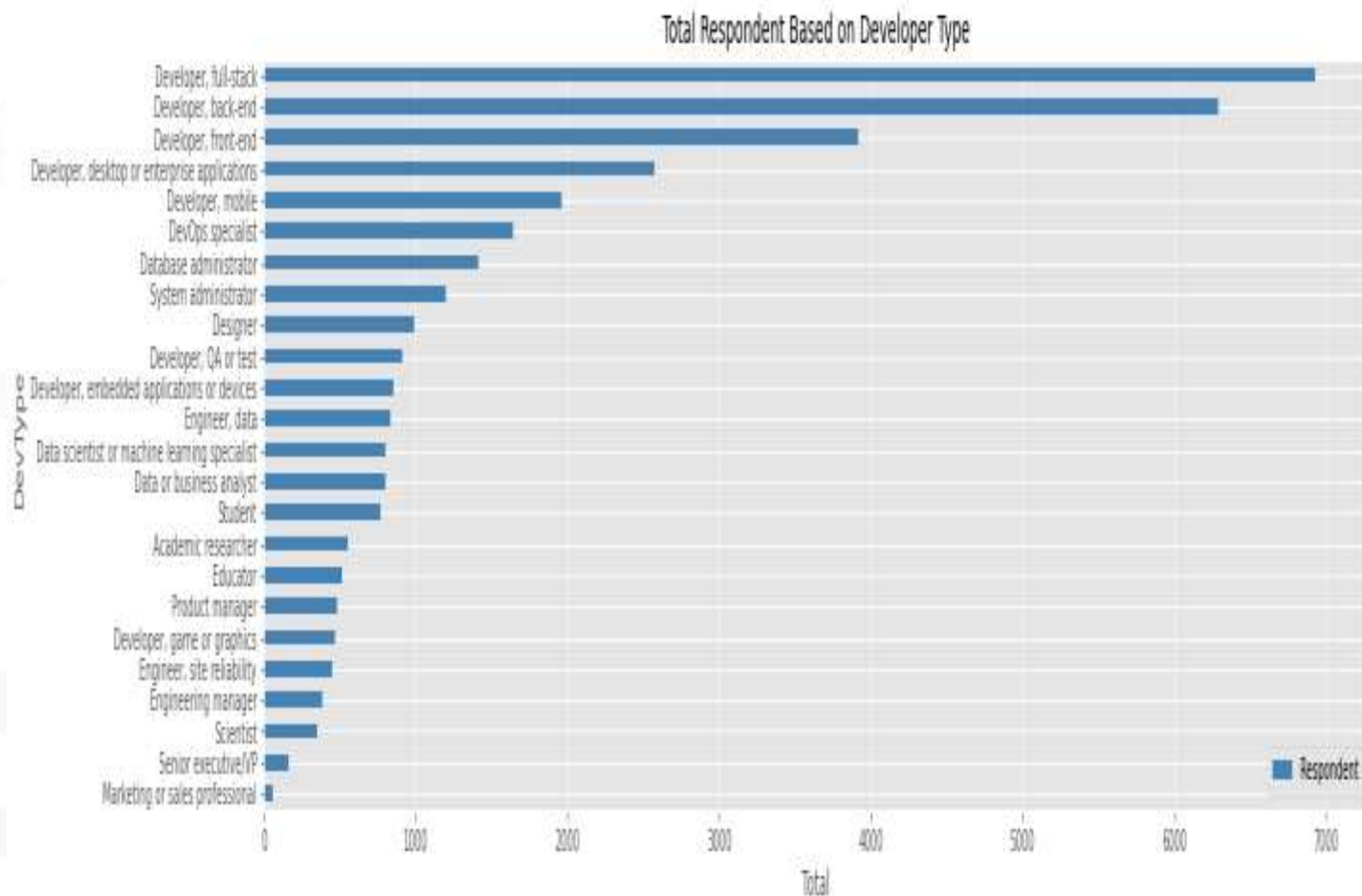
- More countries need equal opportunities to access and benefit from new technology
- Programmers should stay updated with the latest technology trends to remain competitive.
- Employment practices should be free from gender and age discrimination, and companies should drive equity when hiring.

CONCLUSION

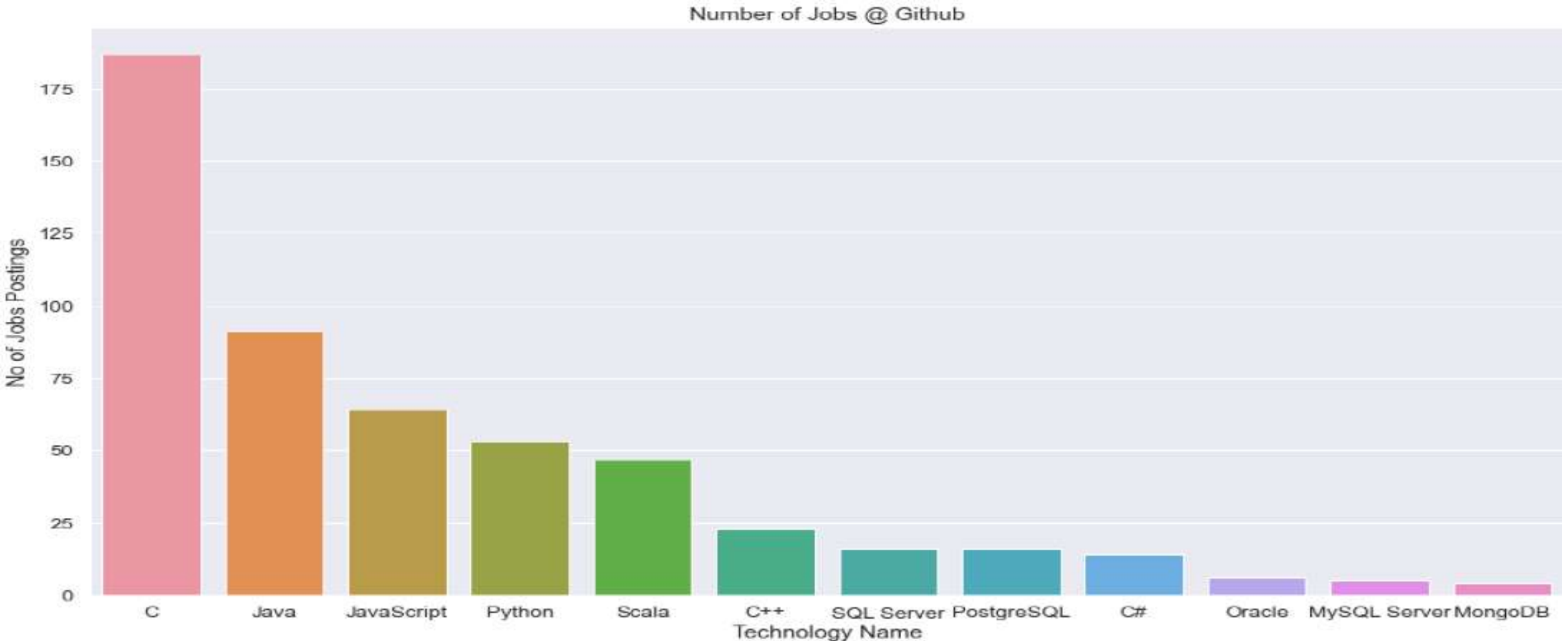


- Programming languages, databases, platforms, and web frameworks are evolving, affecting industry standards.
- Machine learning should be used to predict future tech developments and salary trends.
- Technology trends are changing quickly, with big shifts expected soon.
- Action must be taken to address skill gaps, ensure equitable technology access, and promote diversity in tech roles.

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

