



EMERGING TECHNOLOGIES TRENDS ANALYSIS

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OUTLINE



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- Methodology
- Results
 - Visualization – Charts
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- Discussion
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- Conclusion
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EXECUTIVE SUMMARY



- Relevant skills required in the field of IT and business consulting are ever-changing and evolving.
- This presentation will show current and future trends in Programming Languages, Databases, Platforms and WebFrames.
 - Current Technology Usage Trend
 - Future Technology Trend
- It is important to identify future skill requirements and trends to keep pace with changing technologies and remain competitive.
- Overall, the aim in identifying future skill requirements and trends is to help the firm make more informed data-driven hiring and budgetary decisions.

INTRODUCTION



- This presentation has been created for stakeholders and business decision makers within the global IT and business consulting services firm.
- Purpose of this Analysis
 - Identify the top programming languages, database, platform and web frame skills in demand
 - Identify skill requirements for future
- Recommendations will be stated based on the analysis.

METHODOLOGY



- Data Collection (Sources)
 - Job postings from GitHub jobs API
 - WebScraping
- Data Exploration
- Data Wrangling
 - Finding Missing Values
 - Determine Missing Values
 - Finding Duplicates
 - Removing Duplicates
 - Normalizing Data
- Exploratory Data Analysis
- Data Visualization
 - Python
 - Excel Cognos
 - presentation

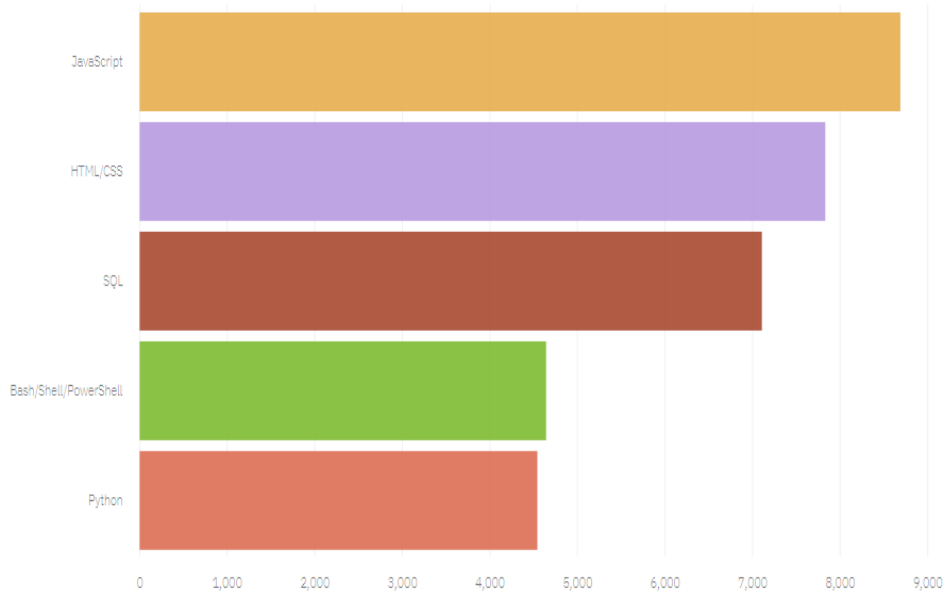
RESULTS

- Exploratory data analysis results
- Programming Languages ,Databases, WebFrames, Platforms trends results

PROGRAMMING LANGUAGE TRENDS

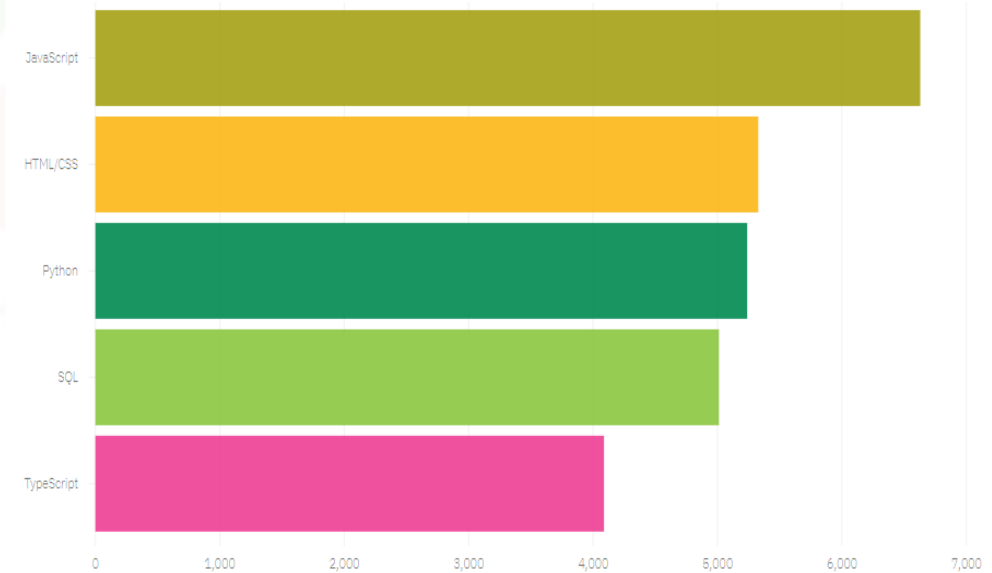
Current Year

Top 5 Language Worked With



Next Year

Top 5 Language Desire Next Year



PROGRAMMING LANGUAGE TRENDS – FINDINGS & IMPLICATIONS

Findings

- JavaScript is top trending language in the world
- Python and TypeScript are becoming more and more popular
- HTML/CSS and SQL still has great portion in language usage trend

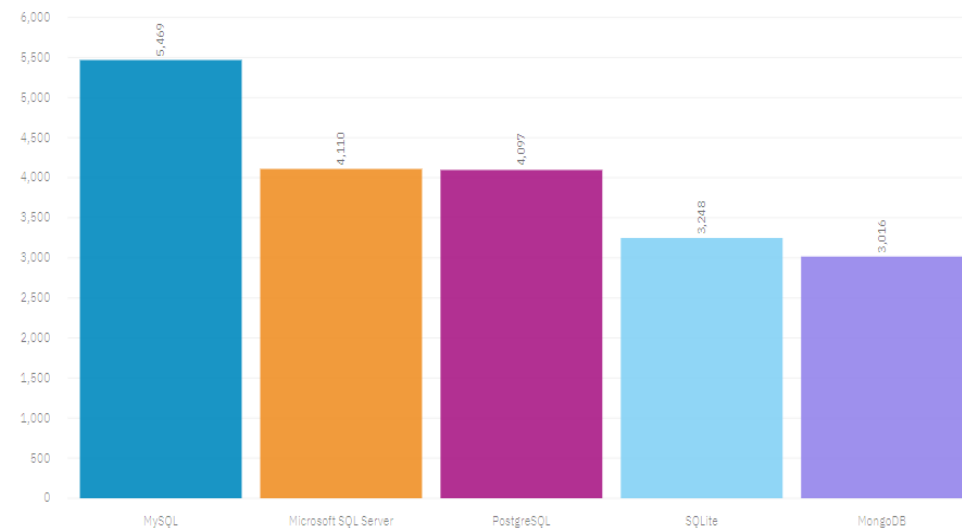
Implications

- Employ more people skilled in Python and TypeScript.
- Python is the new trending language, especially popular in AI fields
- JavaScript and TypeScript are crucial to learn for developers.

DATABASE TRENDS

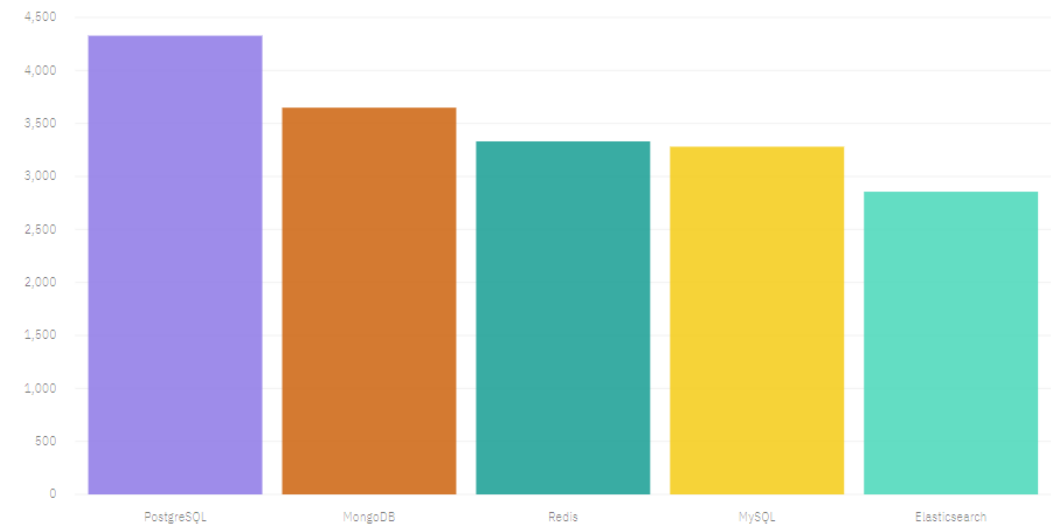
Current Year

Top 5 Database Worked With



Next Year

Top 5 Database Desire Next Year



DATABASE TRENDS – FINDINGS & IMPLICATIONS

Findings

- MySQL is the most popular database
- There are still a lot of companies using Microsoft SQL Server
- MongoDB and Redis are the most favorable NoSQL database

Implications

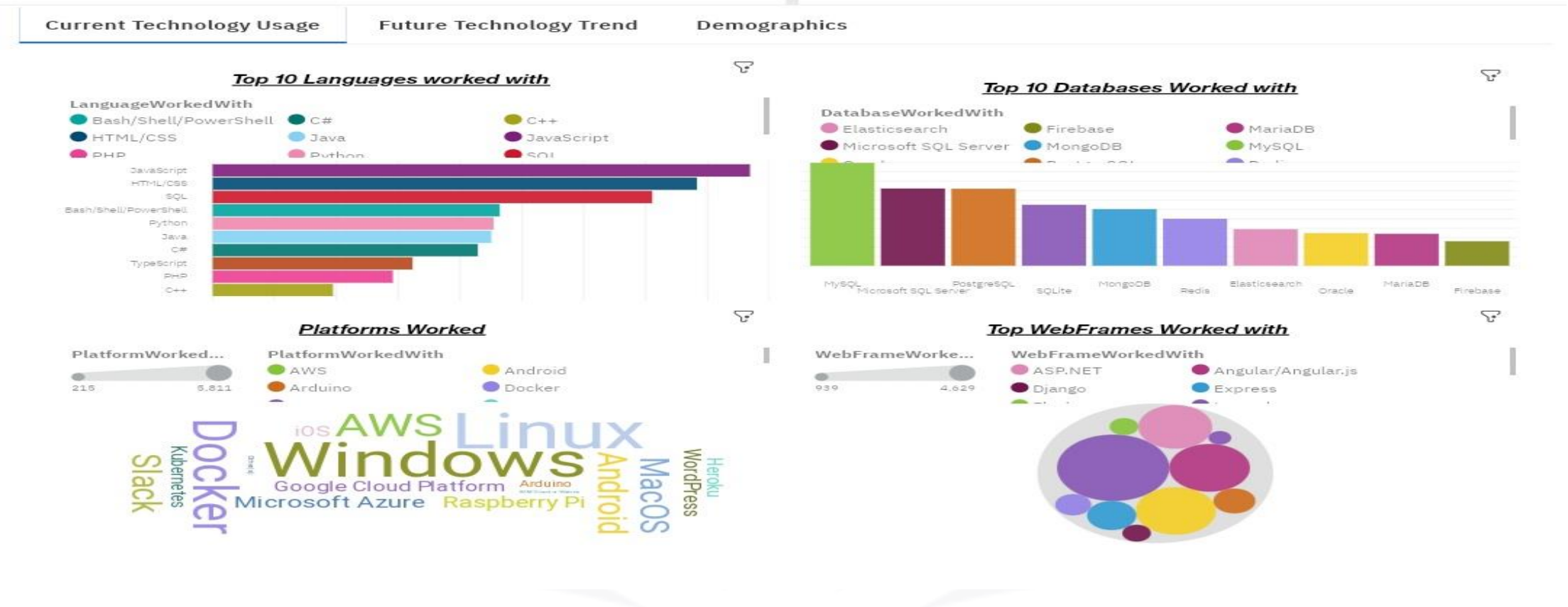
- Open-source databases like MySQL are still preferable
- Software development and Big Data technology still requires SQL
- NoSQL databases will make an impact for relational databases

DASHBOARD

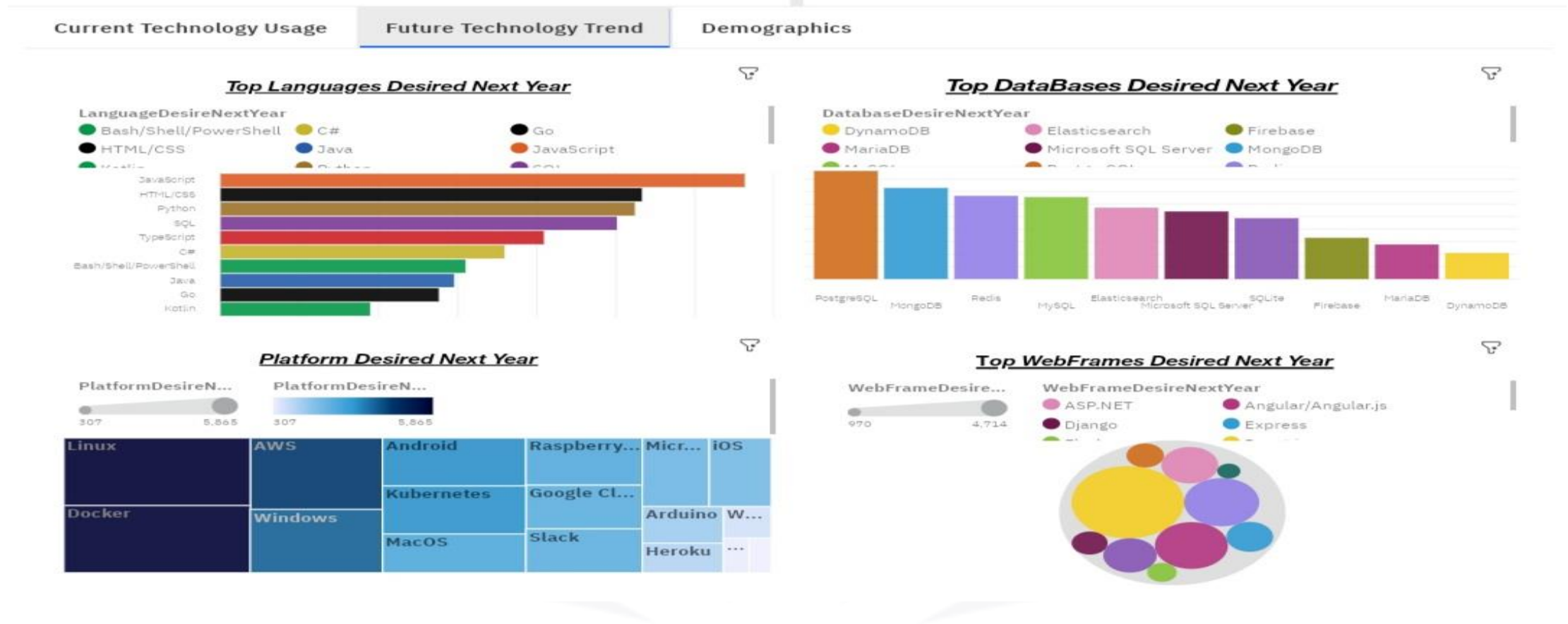


Click below link to view the DashBoard.
<https://dataplatfrom.cloud.ibm.com/dashboards/343209d1-7671-48df-865b-001bbd8baefd/view/5765a73e66e968c249c5dce407c82c06753f2c08b5bb8a06d2837b490b682097a9681294c82a4d5ed2190636fbbe1a0fcd>

DASHBOARD TAB 1



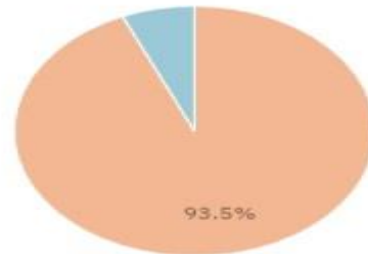
DASHBOARD TAB 2



DASHBOARD TAB 3

Respondent classified by Gender

Gender
Man Woman

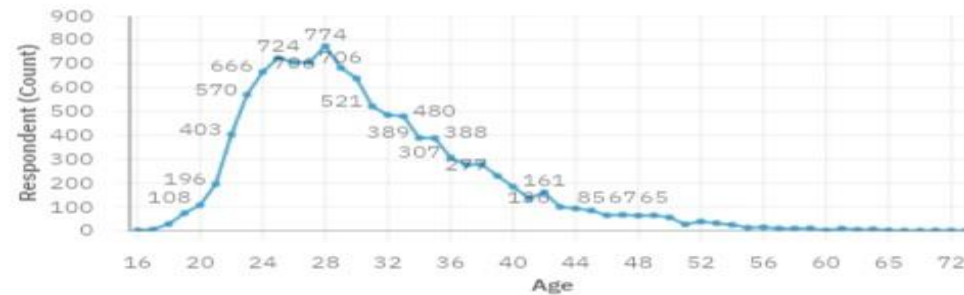


Respondent count for countries

Country (Count)



Respondent Count by Age



Respondent Count by Gender, classified by Formal Education

Level

EdLevel
Associate degree Bachelor's degree (BA, BS, B...
I never completed any formal ... Master's degree (MA, MS, M.E...)



DISCUSSION



- Technology Usage Trend Now and Future
- •Gender, Age and Education Discrimination in IT Industry

OVERALL FINDINGS & IMPLICATIONS

Findings

- Technology trends changes every year
- USA is the top technology country
- There are extreme gender and age discrimination
- Docker and AWS are the most popular platform

Implications

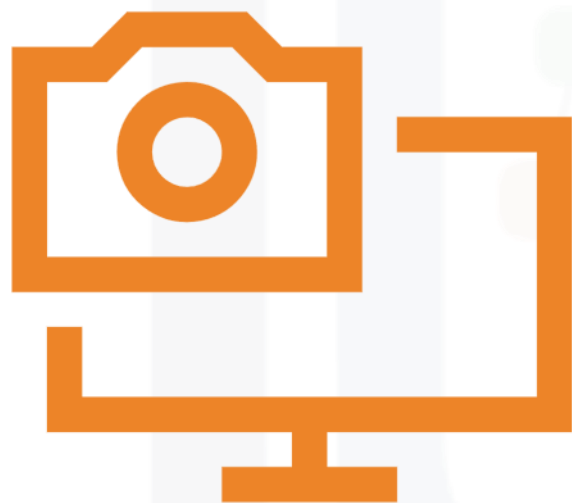
- Programmers should always follow the latest technology trends
- More countries should have the equal chance to be exposed to new technology
- Gender and Age should not be one of the concerns or benefits of Employment

CONCLUSION

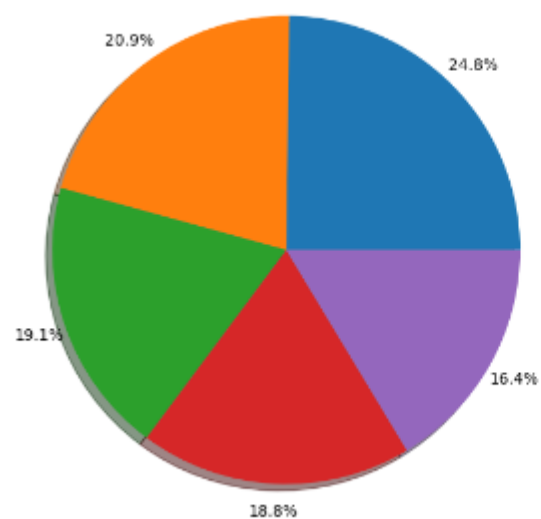


- Technology Trends
- Programming Languages, Database, Platform and Web frame Trends
- Demographics Trends
- Gender and Education
- Programming Languages Trends and Salary Trends

APPENDIX

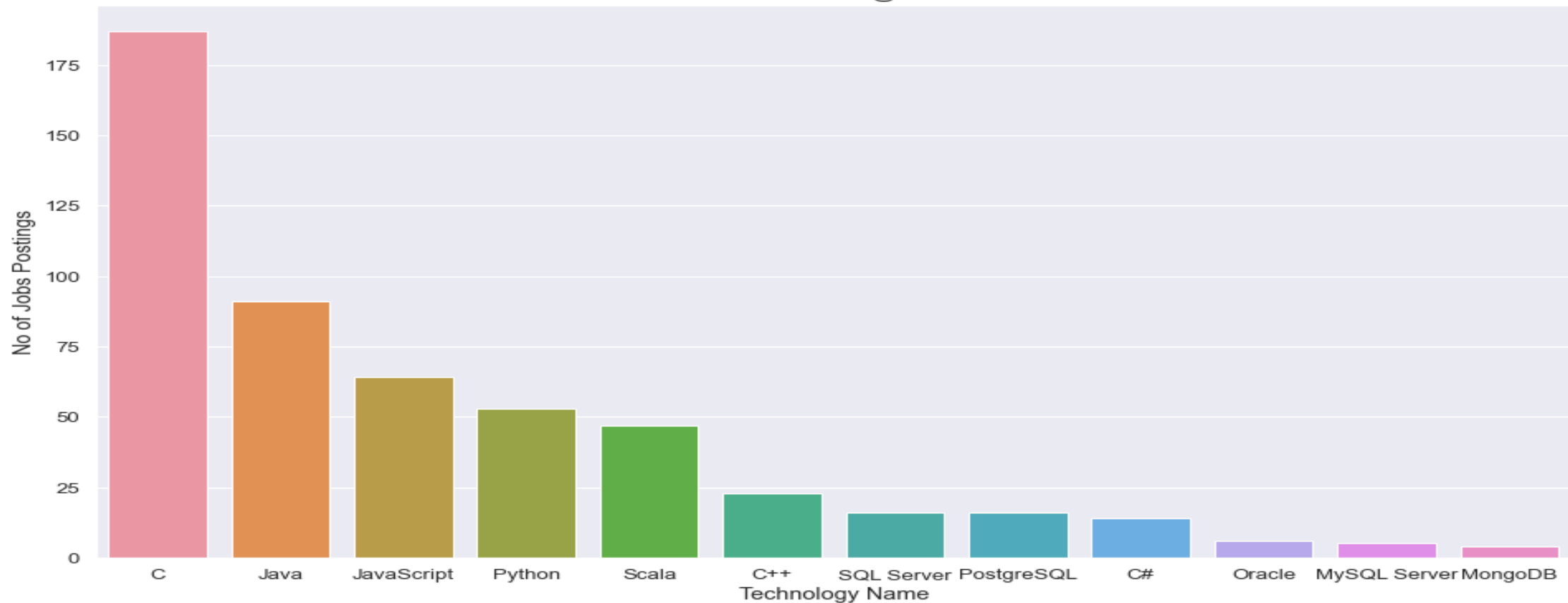


Top 5 Databases Respondents Wish To Learn



JOB POSTINGS

Number of Jobs @ Github



POPULAR LANGUAGES

