



Tech Insights: Current Trends & Future Landscape

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OUTLINE



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- Introduction
- Methodology
- Results
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- Discussion
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- Conclusion
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EXECUTIVE SUMMARY



- Current Technology Trends
 - Database
 - Language
 - Platform
 - Web Framework
- Future Technology
- Demographics Survey

INTRODUCTION



About:

Analyzing the trends in software development and the trends in technology.

Purpose:

- Identify computational skill requirements for the future
- What are the top programming languages in demand?
- What are the top database skills in demand?
- Popular platforms used

Audience:

Human Resource and IT Head

METHODOLOGY



- Data Collection
- Data Exploration
- Data Wrangling
- Data Visualization
- Reporting

RESULTS

Respondent	LanguageWorked...	LanguageDesireNextY...	DatabaseWorked...	DatabaseDesireNextY...	PlatformWorked...	PlatformDesireNext...	WebFrameWorked...	WebFrameDesireNextY...
4	C	C	MySQL	MySQL	Linux	Linux		
4	C++	C#	SQLite	SQLite	Windows	Windows		
4	C#	JavaScript						
4	Python	SQL						
4	SQL							
9	Bash/Shell/PowerShell	Bash/Shell/PowerShell	DynamoDB	PostgreSQL	AWS	AWS	Express	Express
9	C#	C	PostgreSQL	Redis	Docker	Docker	Ruby on Rails	Ruby on Rails
9	HTML/CSS	HTML/CSS	SQLite	SQLite	Heroku	Heroku	Other(s):	Other(s):
9	JavaScript	JavaScript			Linux	Linux		
9	Python	Ruby			MacOS	MacOS		
9	Ruby	Rust			Slack	Slack		
9	Rust	SQL				Other(s):		
9	SQL	TypeScript						
9	TypeScript	WebAssembly						
9	WebAssembly	Other(s):						
9	Other(s):							
13	Bash/Shell/PowerShell	Bash/Shell/PowerShell	Couchbase	Firebase	Android	Android	Angular/Angular.js	Express
13	HTML/CSS	HTML/CSS	DynamoDB	MySQL	AWS	AWS	ASP.NET	Vue.js
13	JavaScript	JavaScript	Firebase	Redis	Docker	Docker	Express	

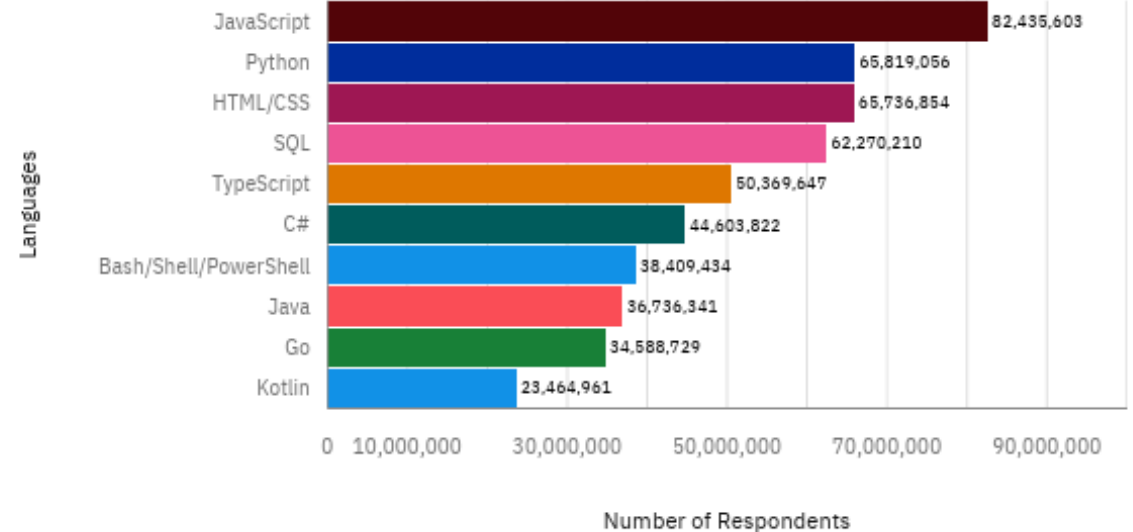
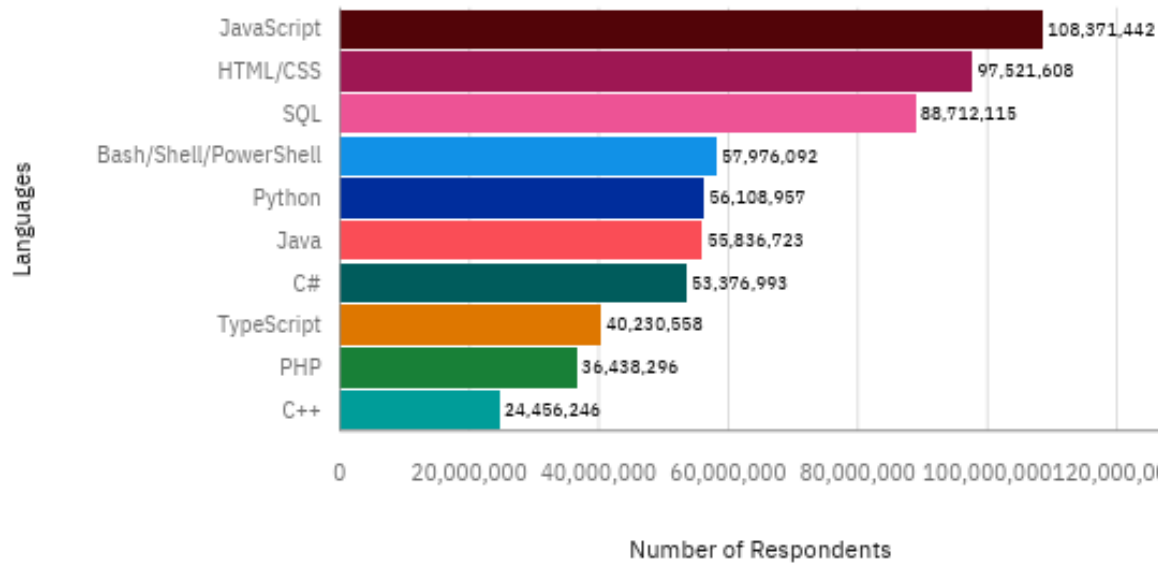
PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

Top 10 Programming Language Experience

Top 10 Languages Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Current Top Programming Languages
- Emerging Languages Next Year
- PowerShell's Outlook

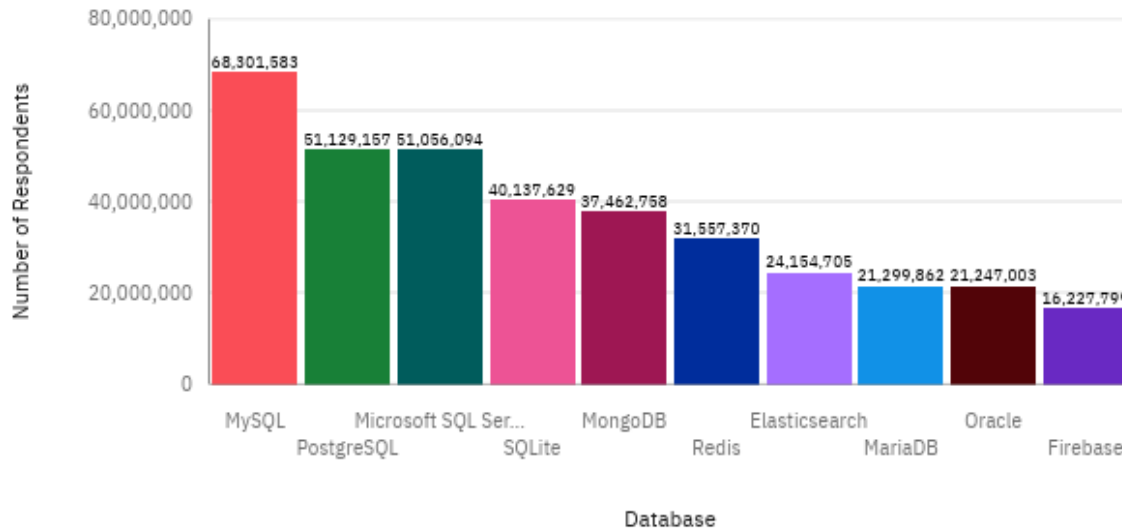
Implications

- Continued High Demand for Web Development
- SQL Essential for Big Data
- Python for AI and ML
- Future Opportunities in Web Development
- Python's Role in Technological Advancements

DATABASE TRENDS

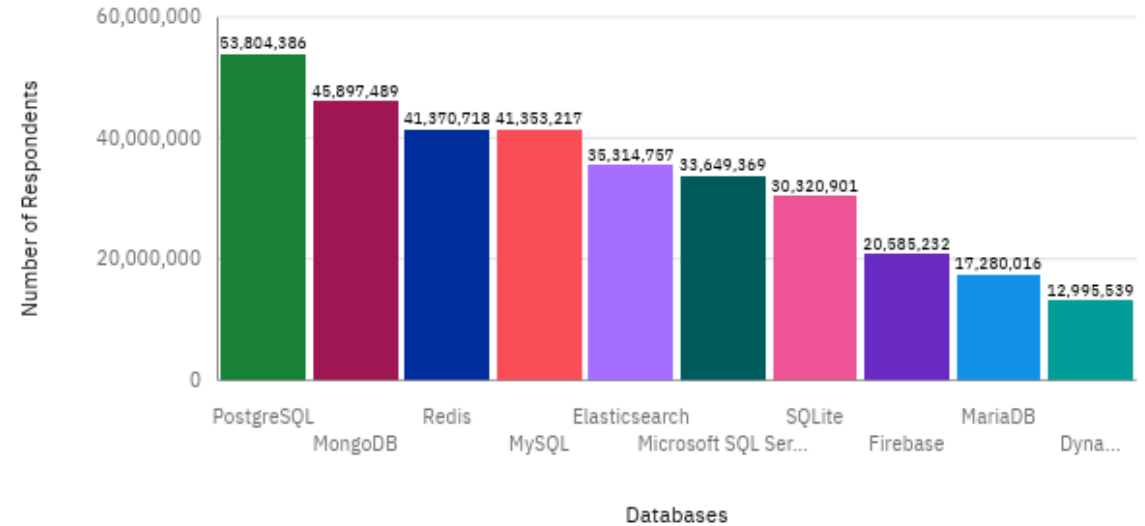
Current Year

Top 10 Database Worked With



Next Year

Top 10 Database Desired Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Database Landscape Dominance
- Open Source Preference
- Microsoft SQL Server Standing
- Rising Stars

Implications

- Cost-Effective Open Source Solutions
- NoSQL for Non-Relational Data
- Redis and Elasticsearch for the Future
- Diverse Appeal of MySQL

DASHBOARD

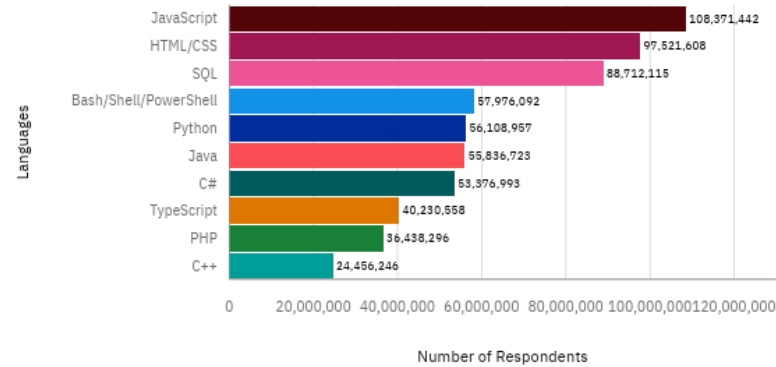


https://github.com/irene-Datalover/IBM-Data-Analyst-Capstone-Project/blob/main/Peer-Graded%20Assignment_%20Building%20a%20dashboard%20with%20IBM%20Cognos%20Analytics.pdf

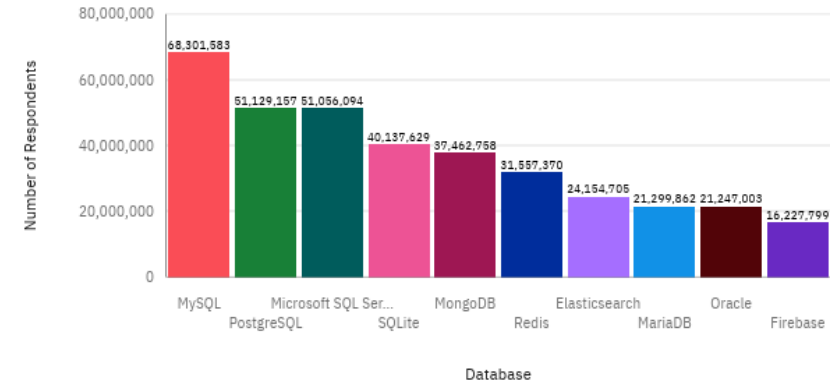
DASHBOARD TAB 1

Current Technology Usage

Top 10 Programming Language Experience



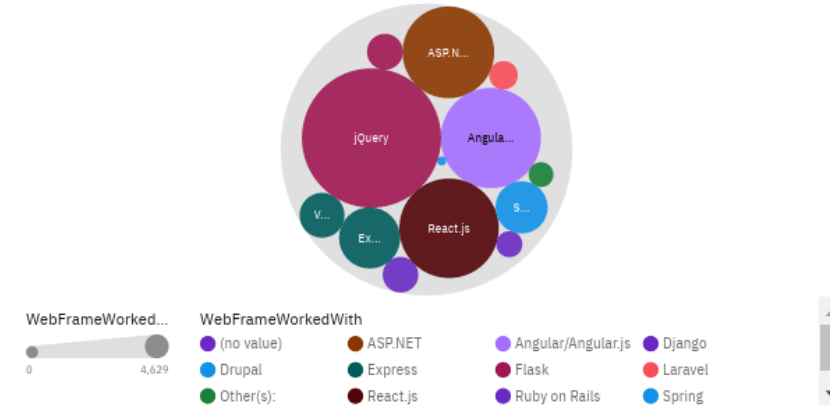
Top 10 Database Worked With



Platforms Interacted



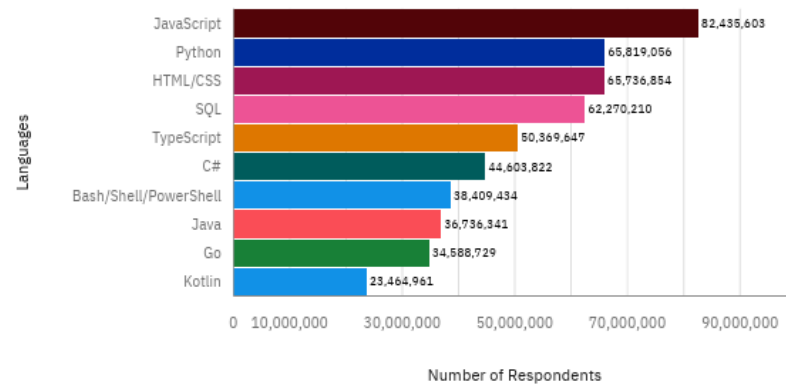
Top 10 Web Frames Worked With



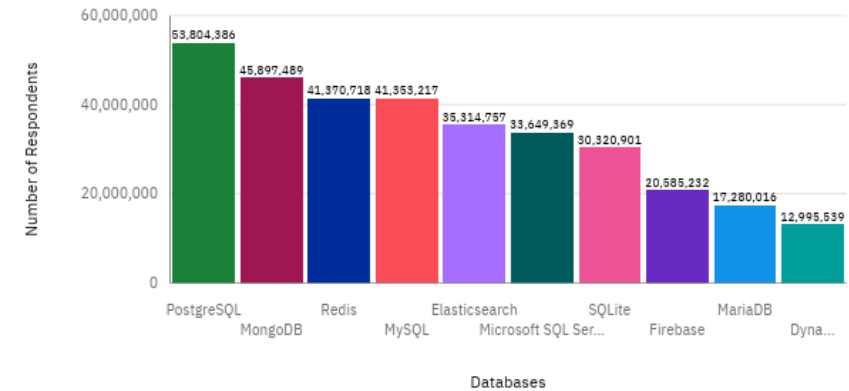
DASHBOARD TAB 2

Future Technology Trend

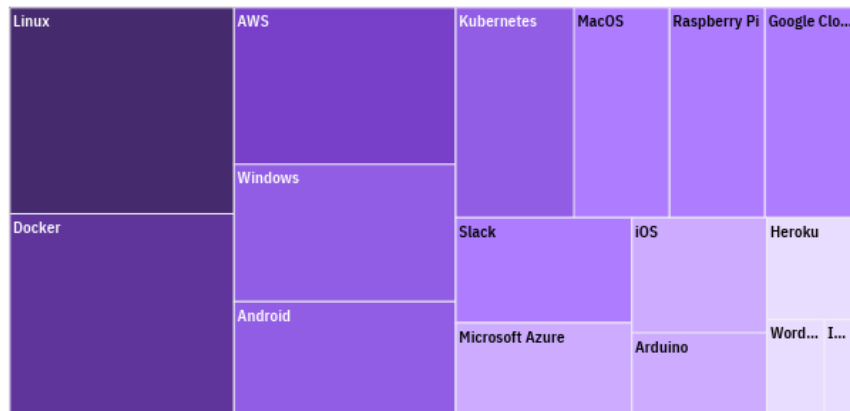
Top 10 Languages Desired Next Year



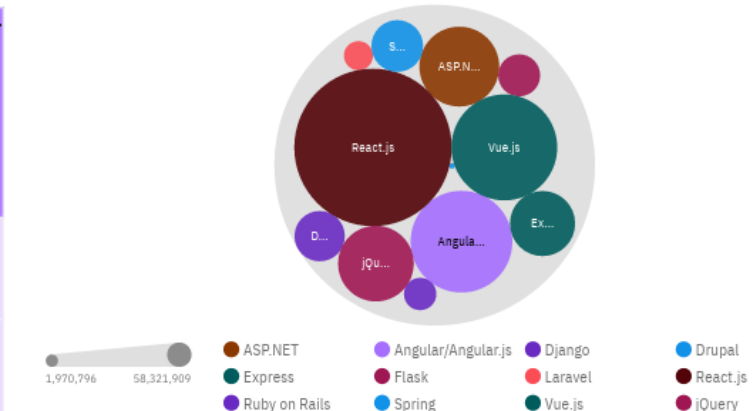
Top 10 Database Desired Next Year



Platforms Desired Next Year



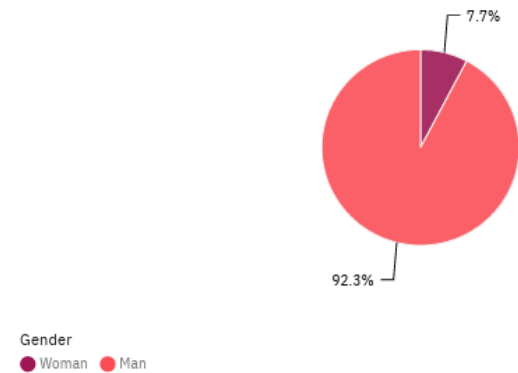
Top 10 Web Frames Desired Next Year



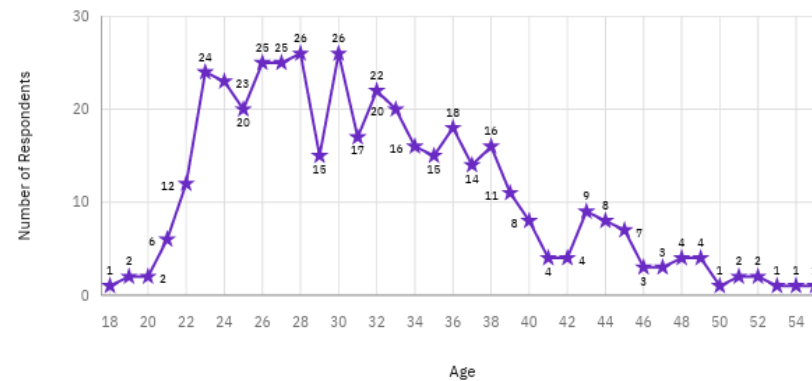
DASHBOARD TAB 3

Demographics

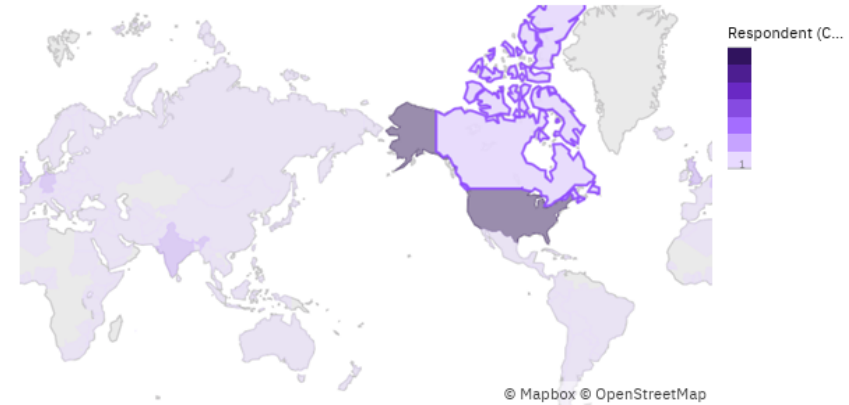
Respondent classified by Gender



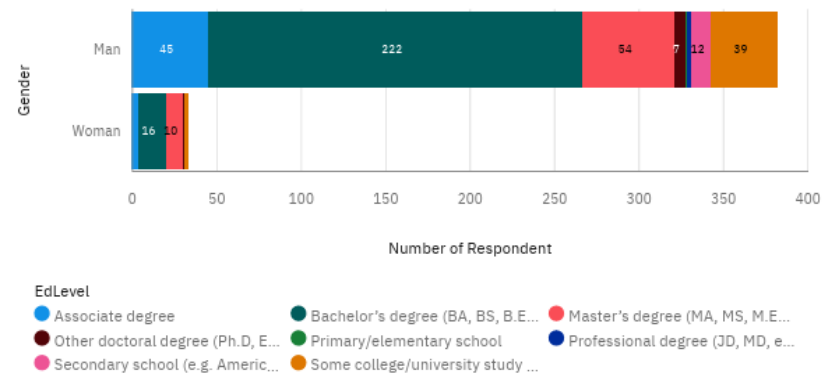
Respondent Count by Age



Respondent Count for Countries



Formal Education Level / Gender



DISCUSSION



- Workforce Training and Reskilling
- Promoting Female Inclusion in Tech
- Closing Technology Gaps in Developing Nations
- Combat Age and Education Discrimination
- Embrace New Technology and Platforms

OVERALL FINDINGS & IMPLICATIONS

Findings

- Rapid Technological Evolution
- Geographical Focus on USA and India
- Growing Popularity of AWS and Docker
- Age and Gender Disparities

Implications

- Technology Adoption by Companies
- Addressing Age and Gender Gaps
- Embrace Cloud and Containerization
- Increased Hiring for Tech Jobs

CONCLUSION

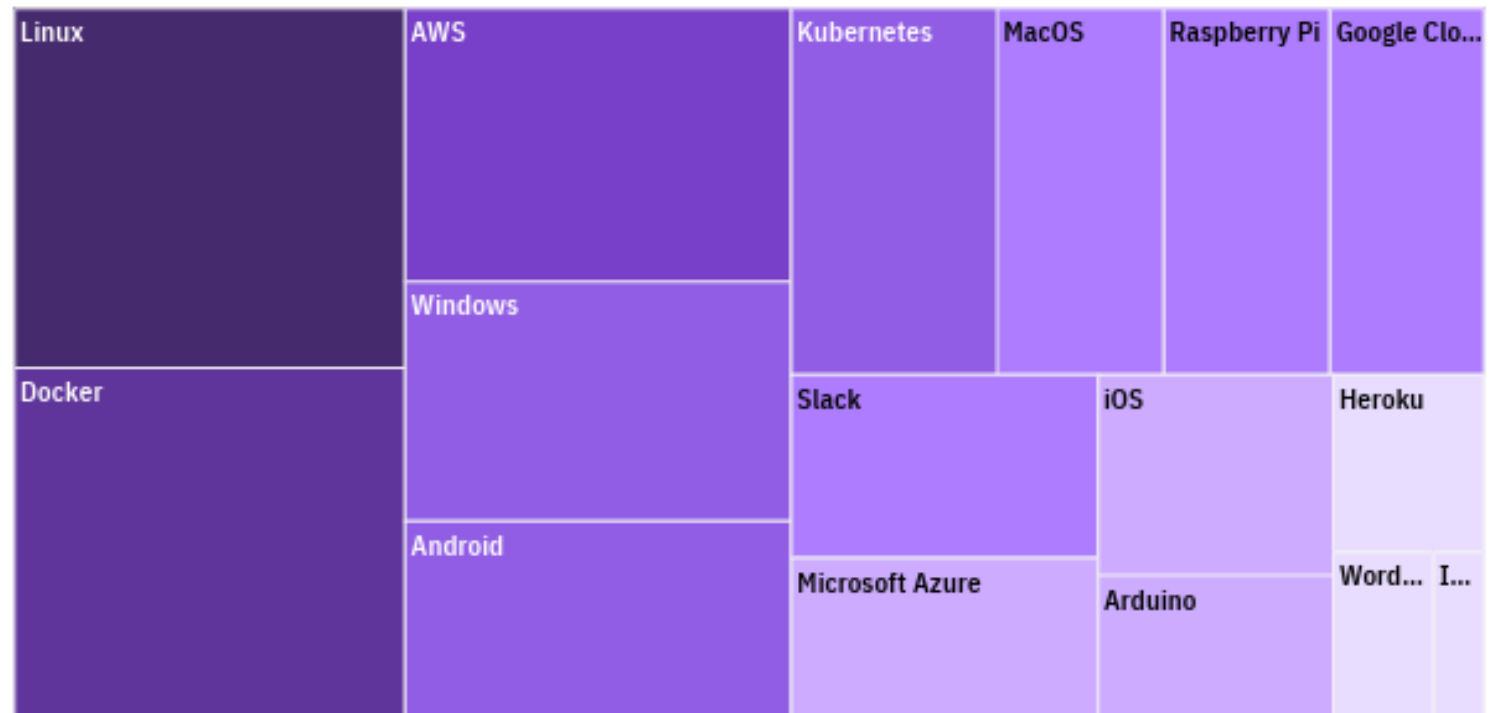


- Technology trends for current and next year
- Demographics overview
- Programming languages, databases and web frames
- Action required
- Apply new ML models for better prediction

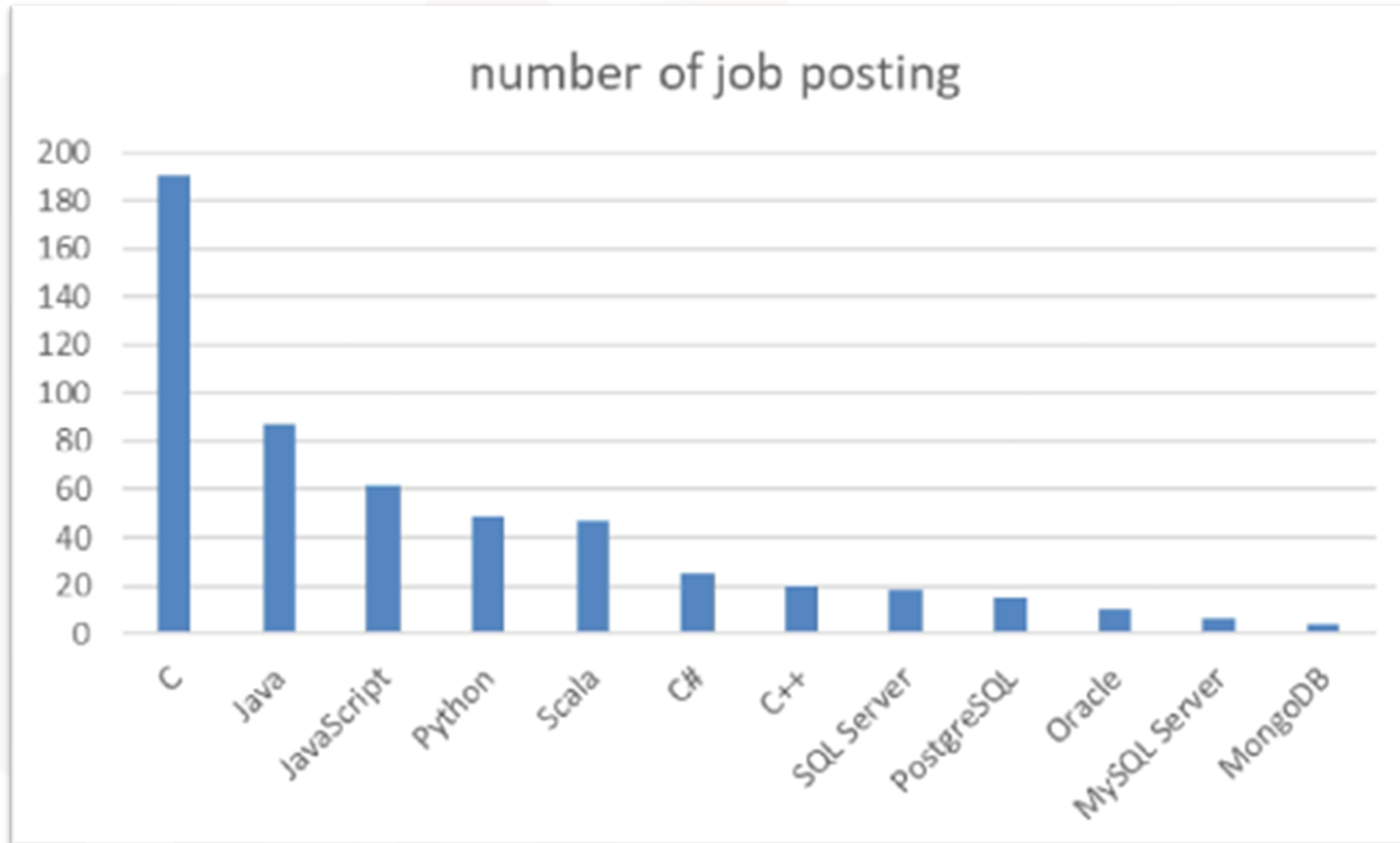
APPENDIX



Platforms Desired Next Year



JOB POSTINGS



POPULAR LANGUAGES

