



STACK OVERFLOW DEVELOPER SURVEY 2019

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OUTLINE



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

EXECUTIVE SUMMARY



- Defining the objective of contextualizing and analyzing data.
- Describing the approach or process used.
- Collecting data.
- Analyzing the data.
- Creating visual representations of the data.
- Presenting the results with the help of graphs and identifying trends.
- Discussing the broader implications and findings based on the results presented earlier.
- Summarizing the final conclusions drawn from the conducted research.

INTRODUCTION



- The annual Developer Survey by Stack Overflow is the world's most extensive and comprehensive survey of individuals engaged in coding worldwide.
- The survey findings may not offer an entirely even representation of the entire developer community.
- The survey collected responses from almost 90,000 developers.
- The survey aims to identify trends that can help predict the future directions of developers.
- The survey provides a characterization of developers from various parts of the world.

METHODOLOGY



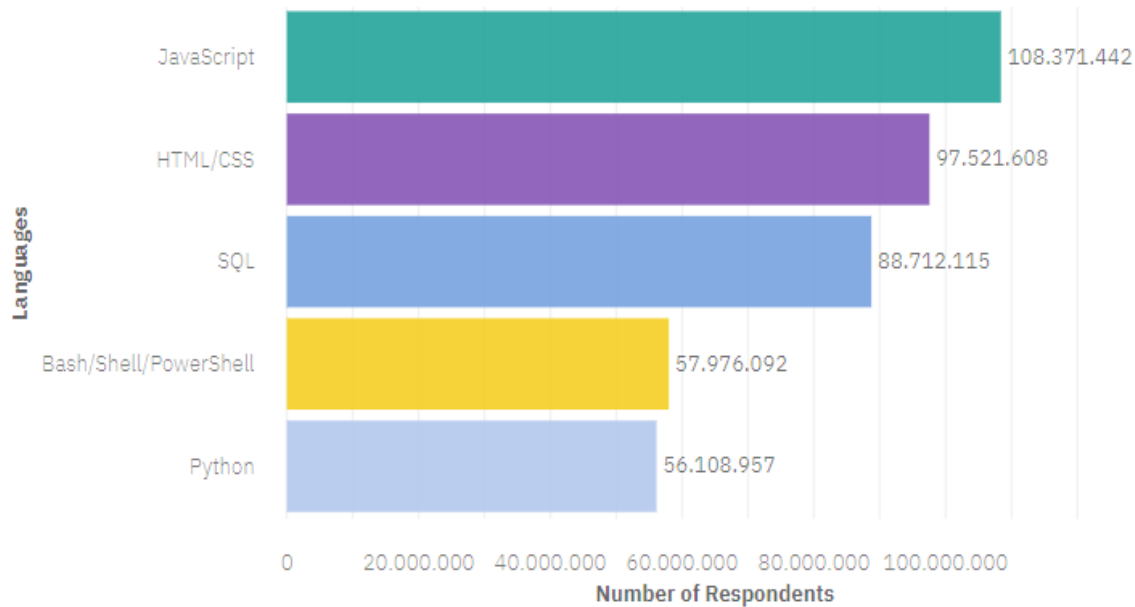
- Gather survey data and delve into its contents.
- Extract data from websites using web scraping techniques.
- Utilize APIs for data retrieval.
- Employ the Request library for data acquisition.
- Manage and clean data through data wrangling.
- Perform exploratory data analysis.
- Examine the distribution of data.
- Address and manage outliers in the dataset.
- Investigate correlations within the data.
- Create data visualizations to emphasize data distribution, relationships, data composition, and comparisons.
- Develop interactive dashboards for data presentation.

RESULTS

PROGRAMMING LANGUAGE TRENDS

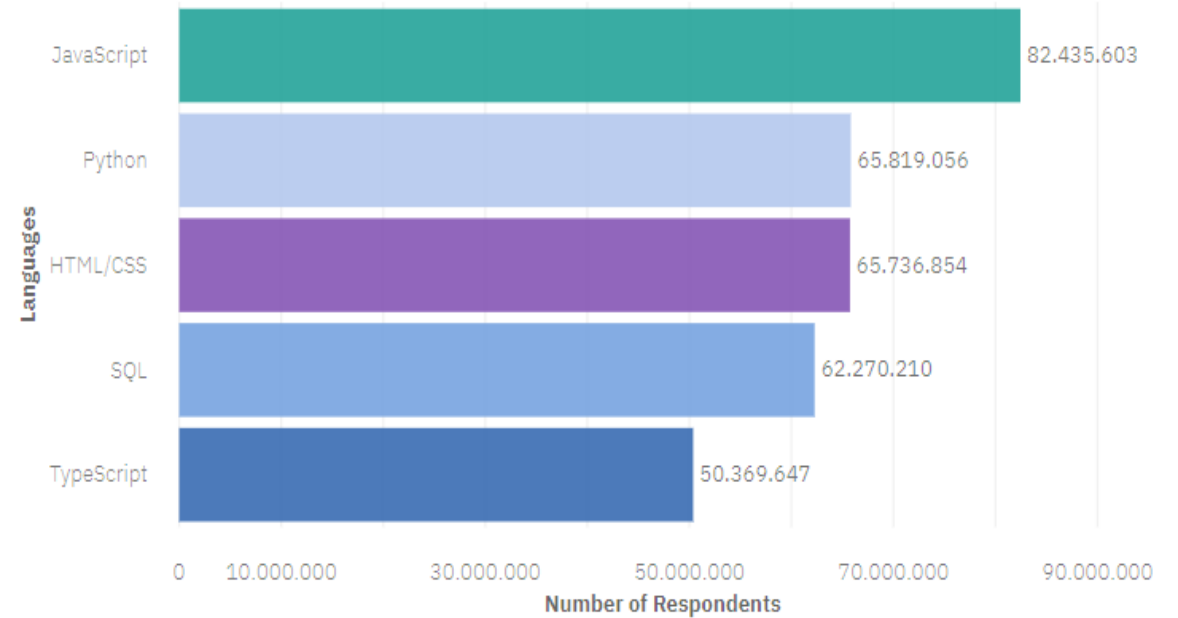
Current Year

Top 5 Programming Language Experience



Next Year

Top 5 Desired Language to Learn



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings:

- JavaScript remains the dominant programming language.
- Python is experiencing rapid growth.
- There is significant interest in TypeScript.

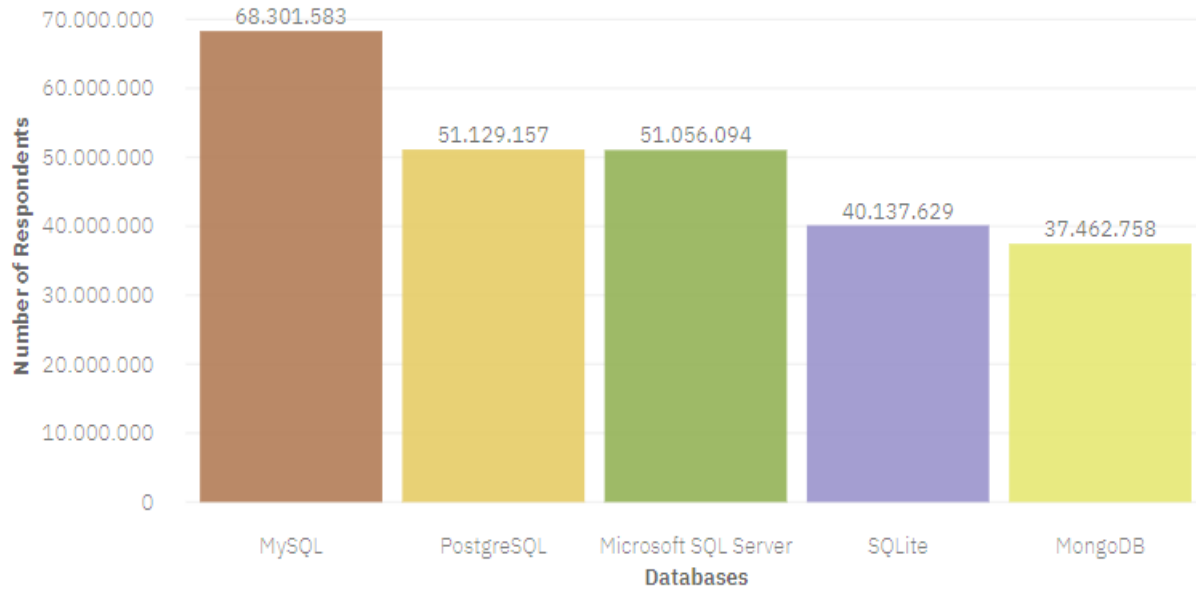
Implications:

- There is a potential for developers to shift from JavaScript to TypeScript.

DATABASE TRENDS

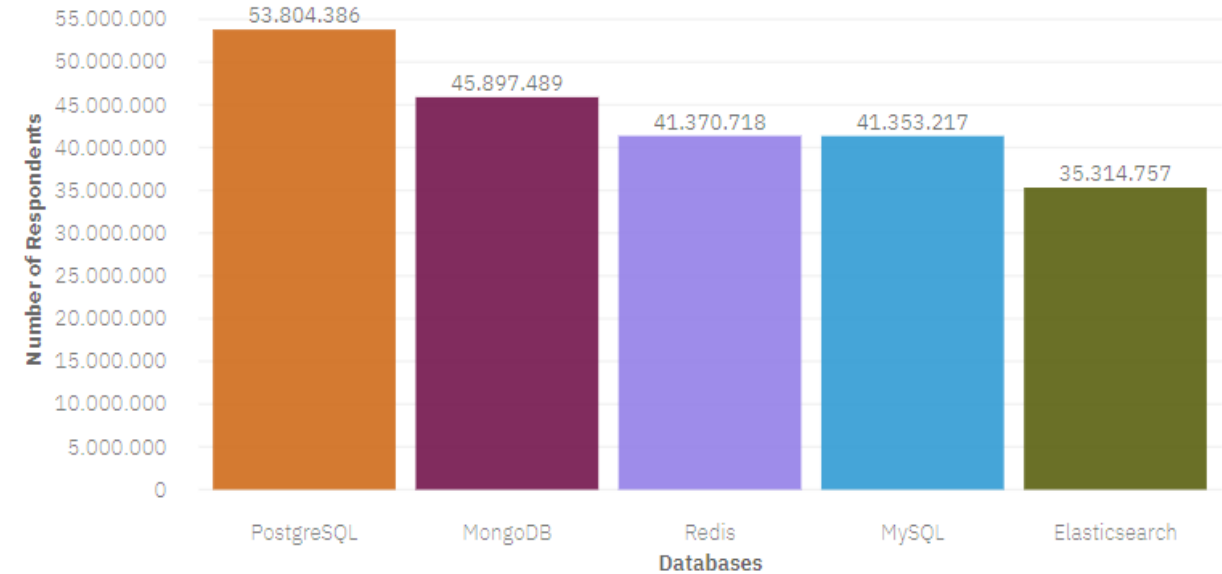
Current Year

Top 5 Databases Worked with



Next Year

Top 5 Desired Database to Learn



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the most widely used database.
- There is limited interest in Microsoft SQL Server and SQLite.
- PostgreSQL and MongoDB are gaining popularity.

Implications

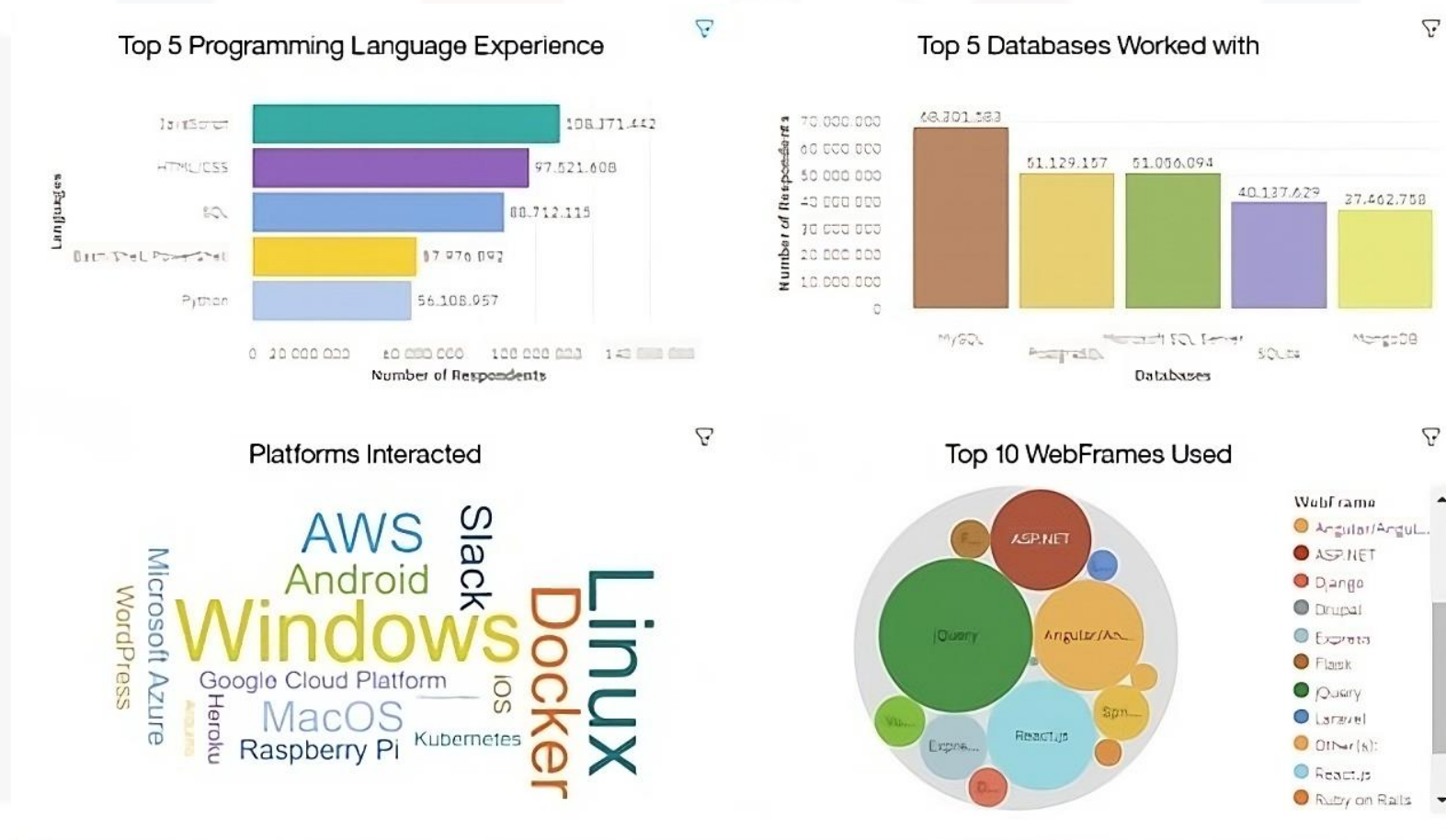
- Microsoft SQL Server and SQLite are experiencing a decline in their market presence.
- PostgreSQL and MongoDB are establishing themselves in the market.

DASHBOARD



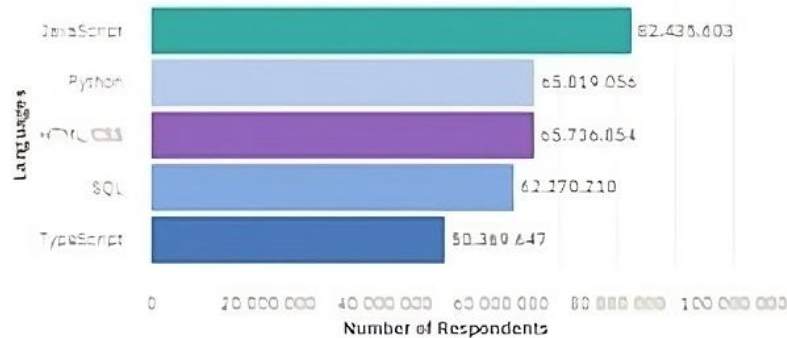
<https://github.com/IchsanHaikal/IBMDDataAnalystCapstoneProject/blob/main/DashboardwithCognosDashboardEmbedded.pdf>

DASHBOARD TAB 1

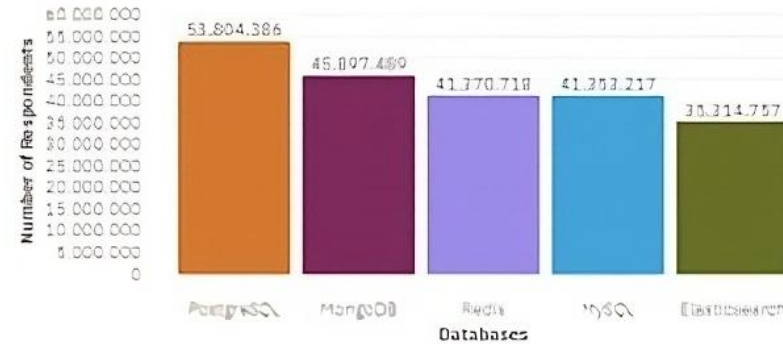


DASHBOARD TAB 2

Top 5 Desired Language to Learn



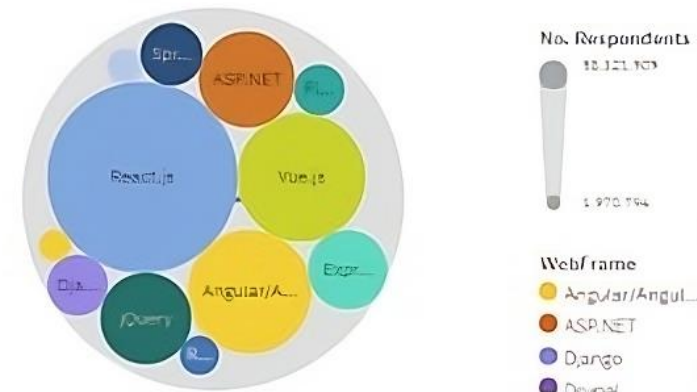
Top 5 Desired Database to Learn



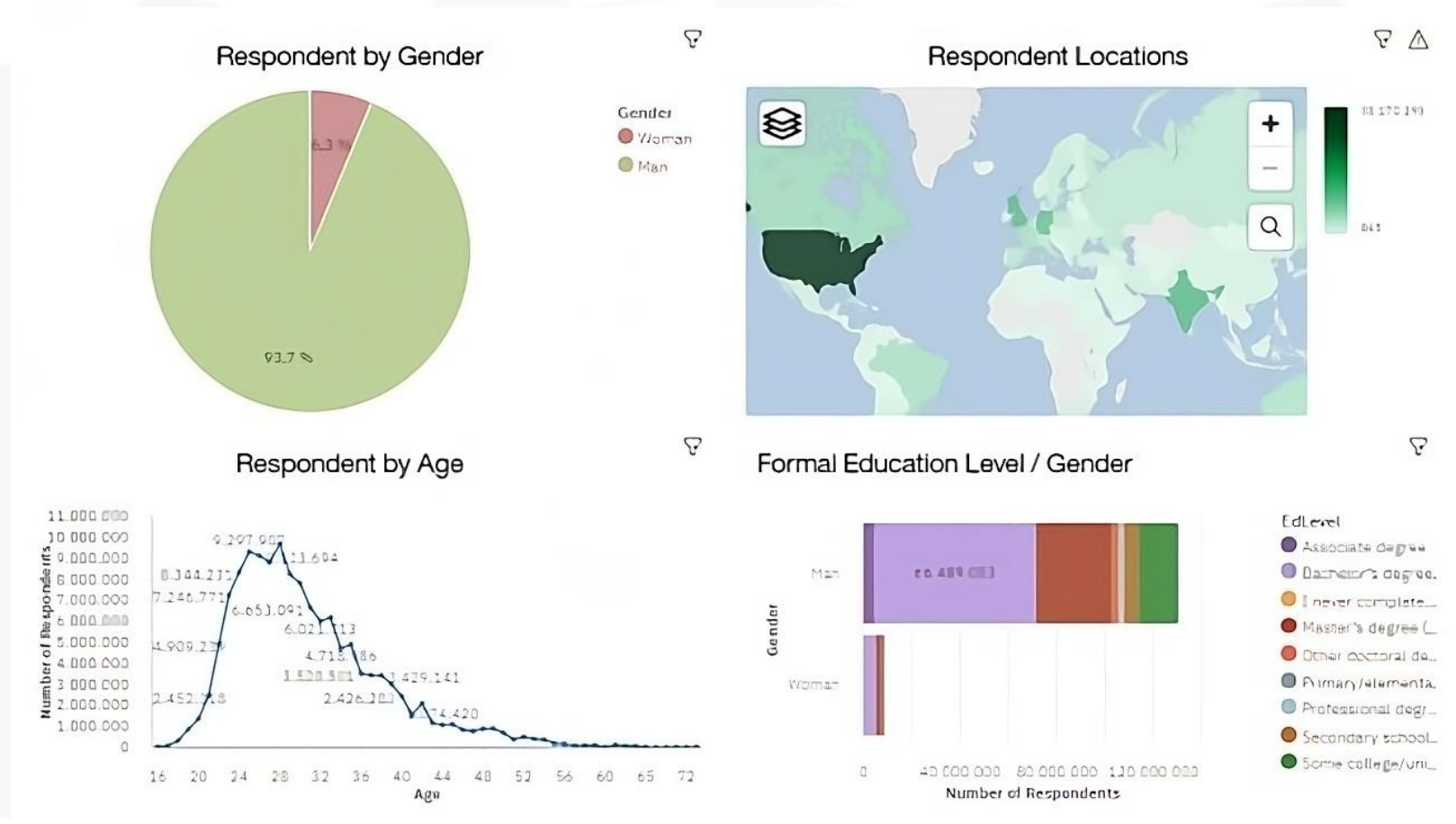
Platform Next Year



Top 10 WebFrame Next Year



DASHBOARD TAB 3



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript is extensively utilized, and TypeScript is gaining popularity.
- More than 90% of developers are young males.
- Developers are predominantly situated in developed countries.

Implications

- JavaScript and TypeScript are attracting a growing number of adherents in web development.
- There is a global division in terms of the location and gender of developers.
- The majority of young developers do not possess postgraduate qualifications.

CONCLUSION

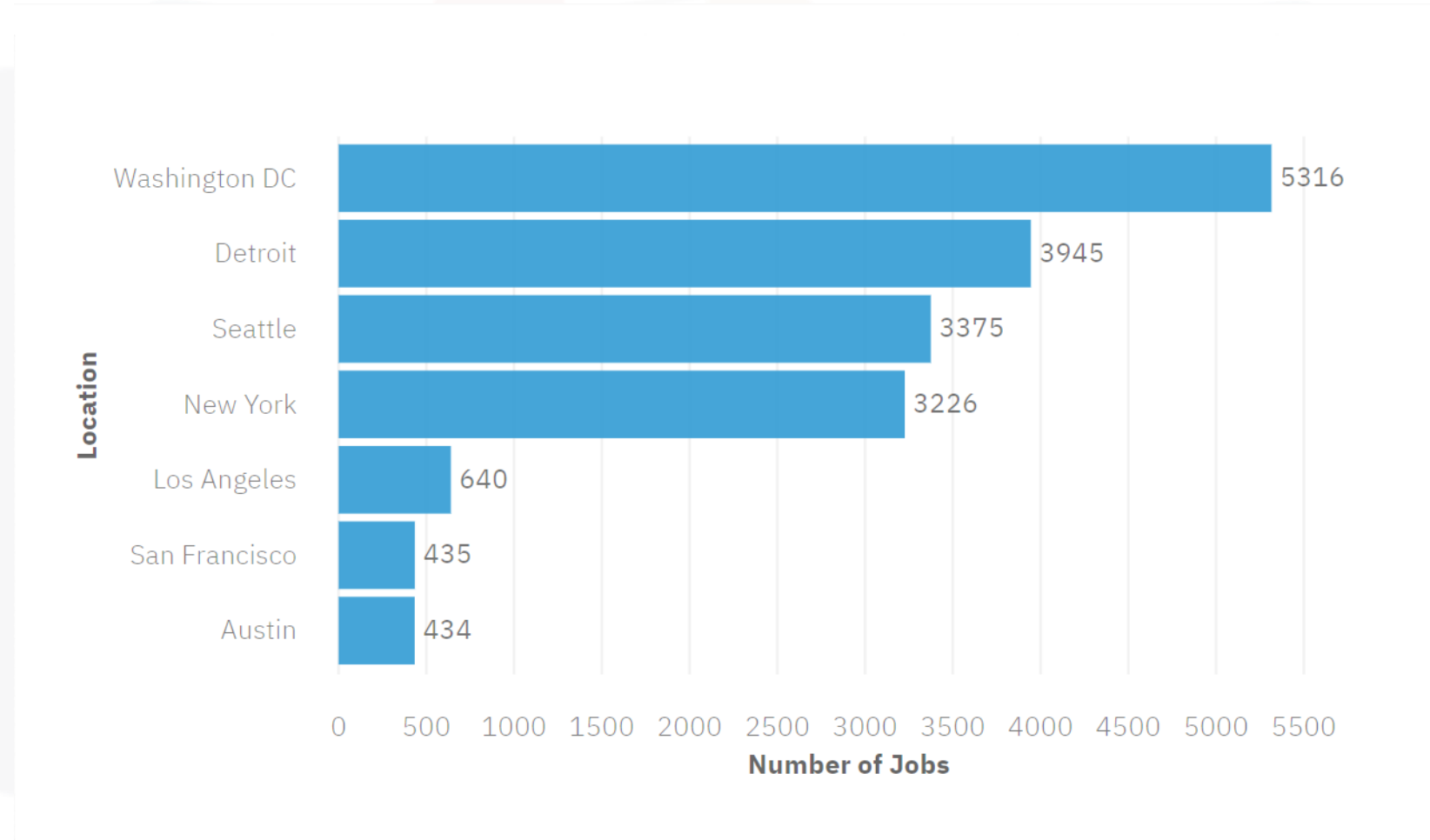


- Developers exhibit distinct and notable traits.
- It is possible to gain a strong understanding of the trends in the popularity of various tools, platforms, and programming languages.
- There is a need to work on expanding access to the job opportunities in the tech industry to developing countries.

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

