



STACK OVERFLOW DEVELOPER SURVEY

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OUTLINE



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

EXECUTIVE SUMMARY



- Data contextualization
- Methodology
 - Data gathering
 - Data analysis
 - Data visualization
- Results supported with graphs
- Discussion of overall finding and implications
- Final conclusions

INTRODUCTION



- Stack overflow annual developer survey is a big survey about people who code around the world
 - Nearly 90,000 developers
 - Over 130 countries
- Technologies and demographics data
- Trends to predict where the developers are going next
- Characterization of developers profile across the globe

METHODOLOGY



- Collect survey data
- Data Wrangling
- Exploratory Data Analysis
 - Distribution
 - Outliers
 - Correlations
- Data Visualization
- Dashboards

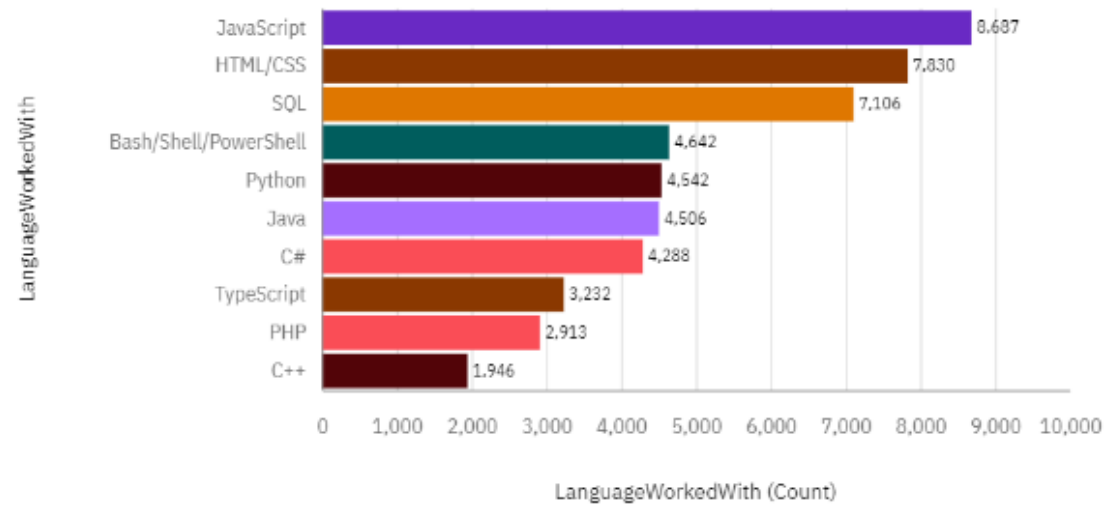
RESULTS



PROGRAMMING LANGUAGE TRENDS

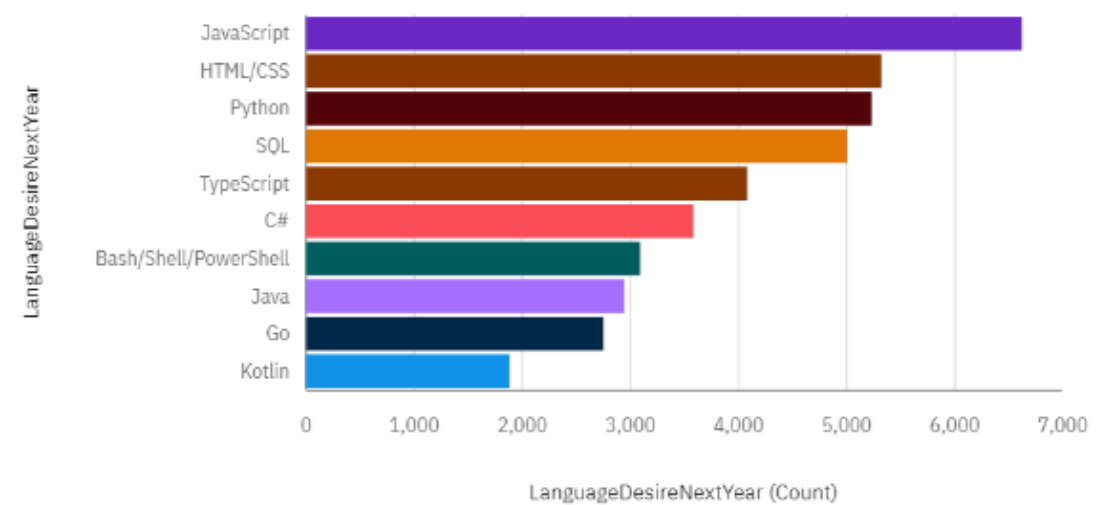
Current Year

Top 10 Programming Language Experience



Next Year

Top 10 Desired Languages to Learn



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript seems to keep as leading language
- Python fastest-growing
- Great interest in TypeScript

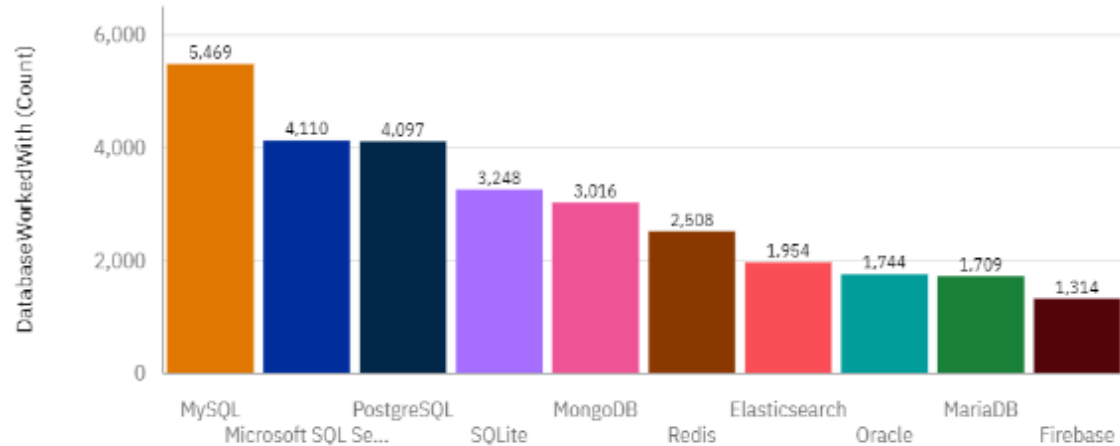
Implications

- Possible developers migration from JavaScript to TypeScript

DATABASE TRENDS

Current Year

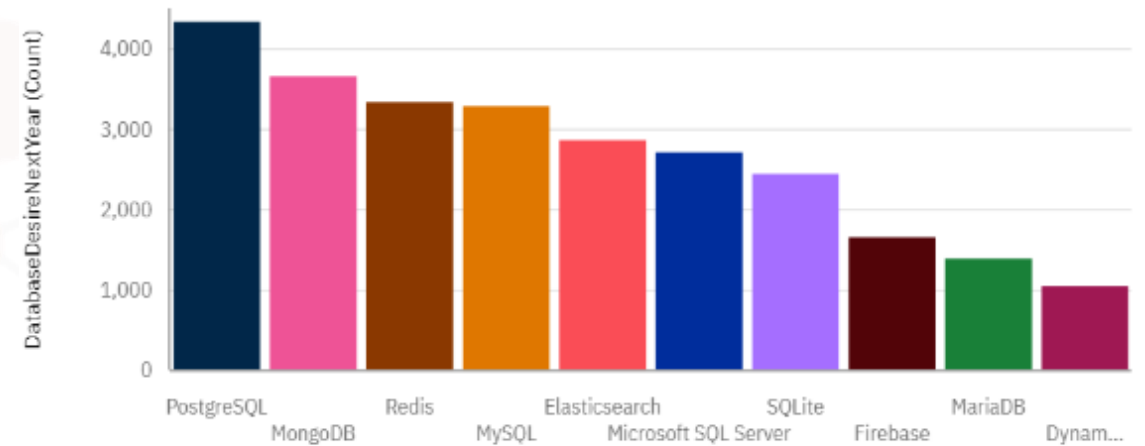
Top 10 Database Worked With



DatabaseWorkedWith

Next Year

Top 10 Desired Databases to Learn



DatabaseDesireNextYear

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL as most used database
- Low interest in learning Microsoft SQL Server and SQLite
- Increasing interest in PostgreSQL and MongoDB

Implications

- Microsoft SQL Server and SQLite losing ground in the market
- PostgreSQL and MongoDB settling up in the market

DASHBOARD

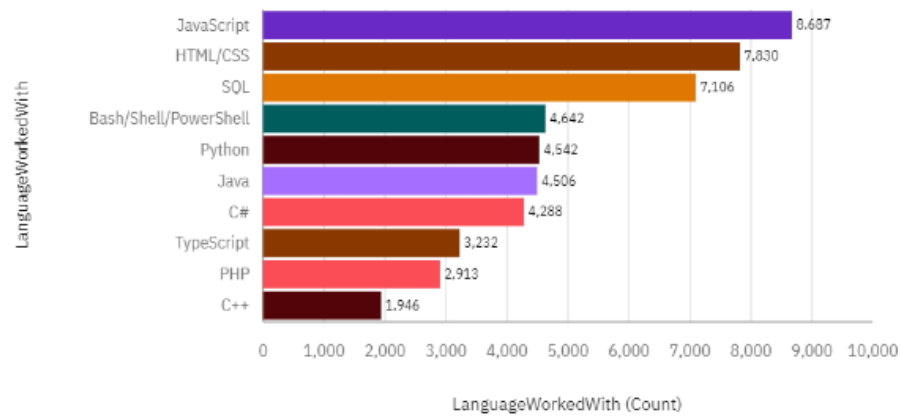


<https://github.com/1sourenan/IBM-Project/blob/main/IBM%20Project%20Dash.pdf>

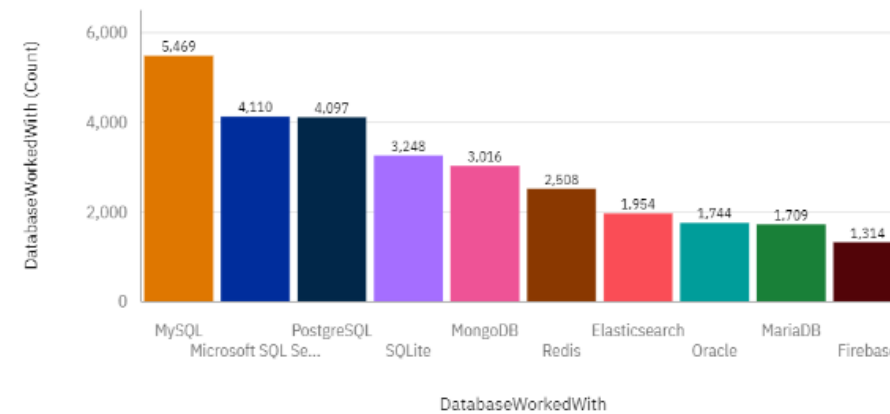
DASHBOARD TAB 1

Current Technology Usage

Top 10 Programming Language Experience



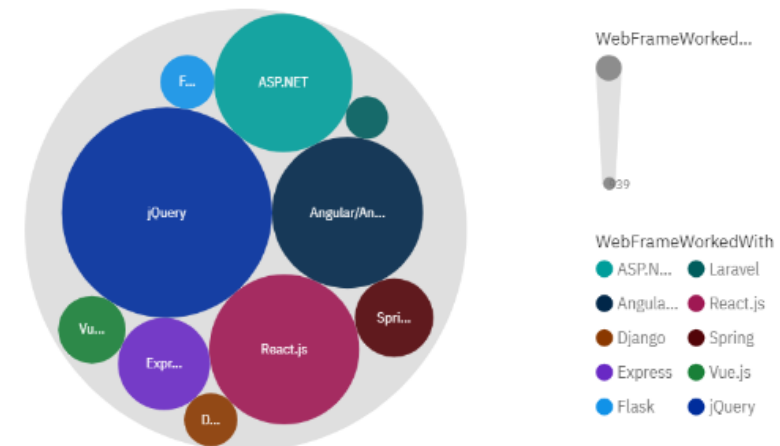
Top 10 Database Worked With



Platforms Interacted



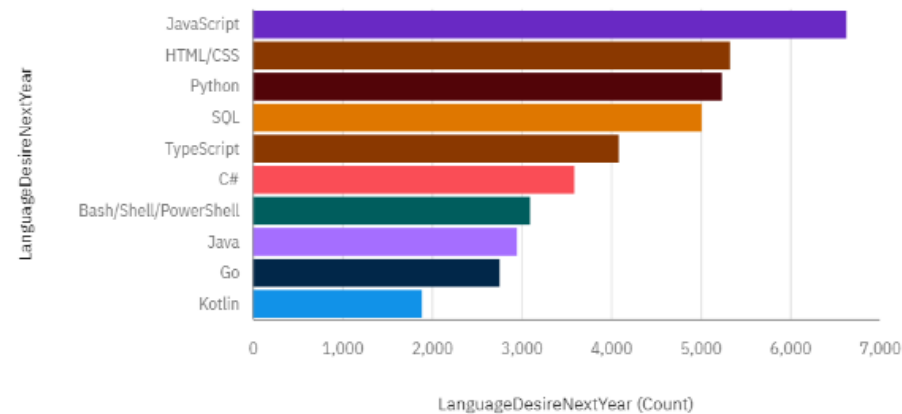
Top 10 WebFrames Used



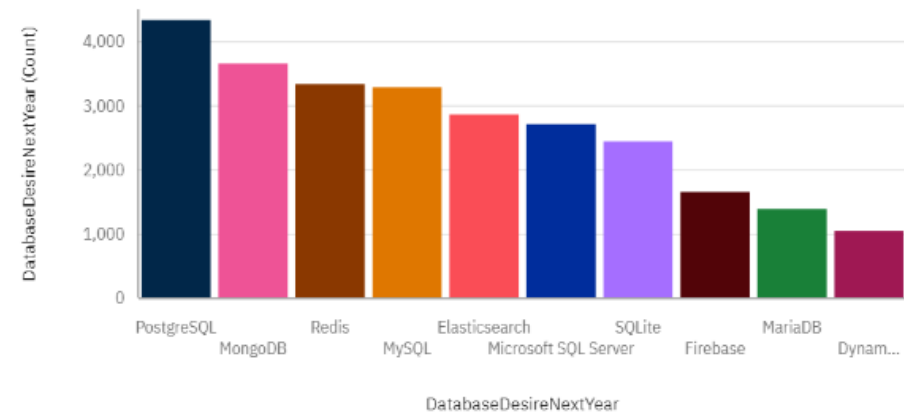
DASHBOARD TAB 2

Future Technology Trend

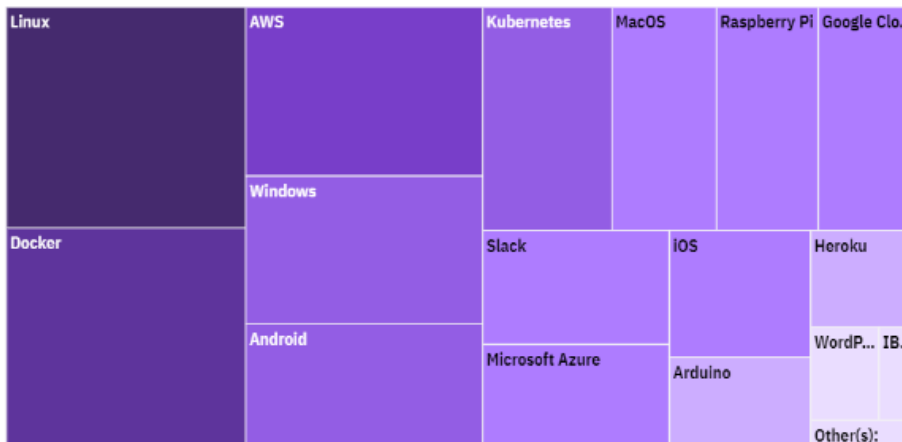
Top 10 Desired Languages to Learn



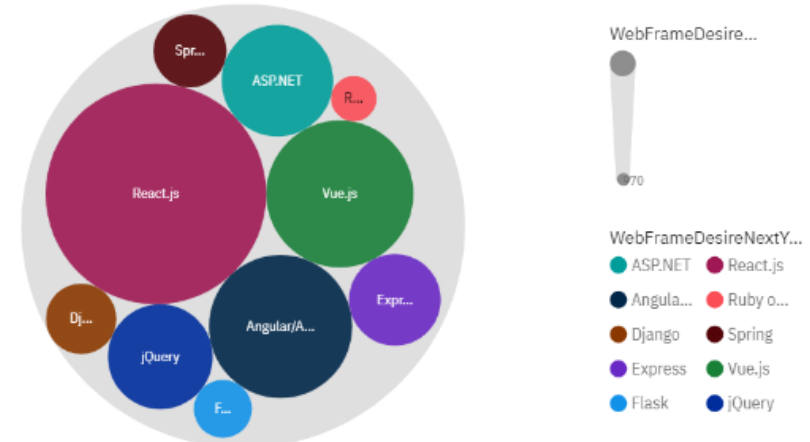
Top 10 Desired Databases to Learn



Platforms Next Year



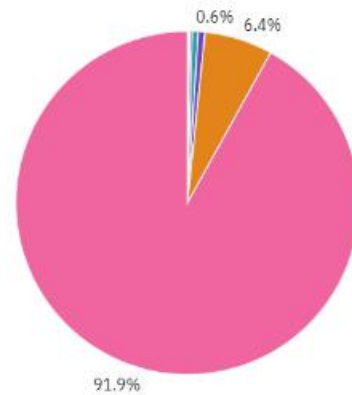
Top 10 Desired WebFrames Next Year



DASHBOARD TAB 3

Demographics

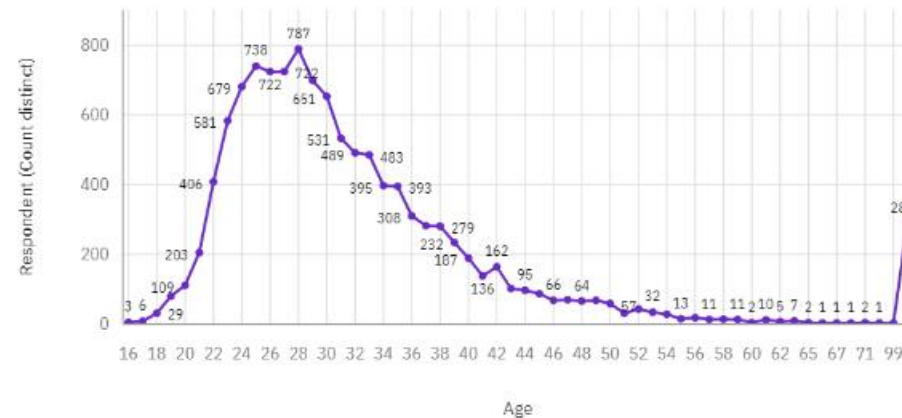
Respondent by Gender



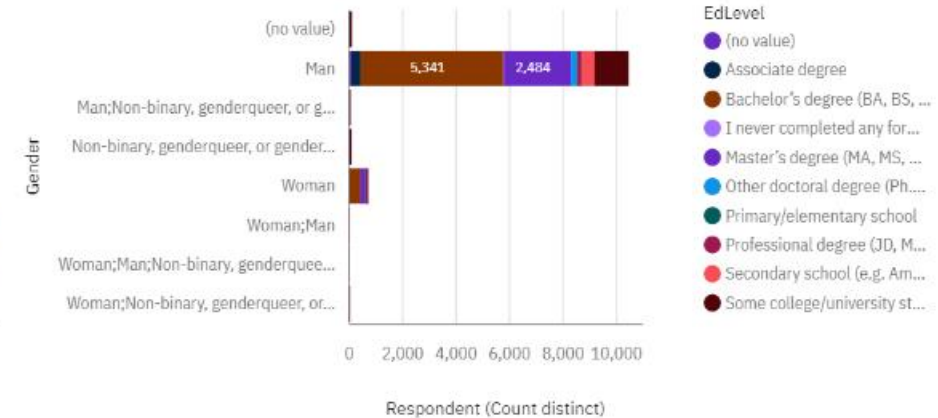
Respondent for Country regions



Respondent by Age



Formal Education Level by Gender



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- JavaScript widely used and TypeScript getting popular
- Over 90% male developers
- Developers most located in developed countries

Implications

- JavaScript and TypeScript web frames gaining followers
- Lack of developers diversity may cause coded bias
- Young people without postgrad studies on its majority

CONCLUSION

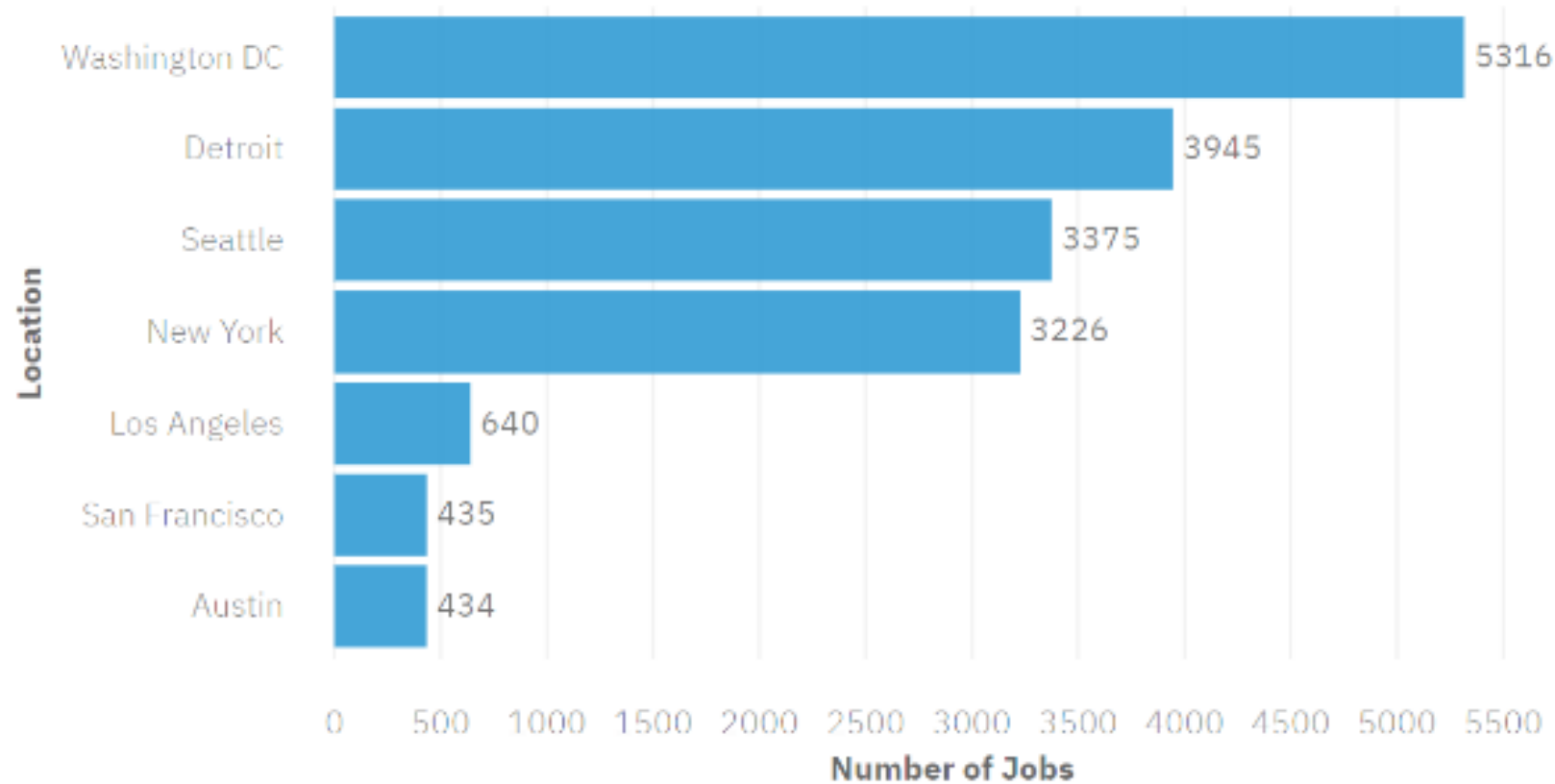


- Developers are very stereotyped people
- Good knowledge about trends of different tools platforms and languages can be obtained
- There is job to be done to increase diversity and spread out this labor market to countries in development

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

