



STACK OVERFLOW DEVELOPERSURVEY 2019

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OUTLINE



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

EXECUTIVE SUMMARY



- Data Contextualization and Analysis goal
- Methodology description
 - Data gathering and wrangling.
 - Data analysis.
 - Data visualizations.
- Results presentation supported with charts and graphs and trends and patterns.
- Discussion of overall findings and implications regarding the previously exposed results.
- Final conclusions of the carried out research and findings.

INTRODUCTION



- Stack Overflow's annual Developer Survey is the most comprehensive and among the world is the largest of people who code around the world.
- In the developer community the results don't represent everyone.
- There are more than 100,000 developers.
- Worldwide developers are characterized.
 - Trend and patterns predict the future of developer.
 - The new future technologies trend for the developer.

METHODOLOGY



- Collect Survey data with the following API's.
 - Rest API
 - Request API
 - Web Scraping
 - Pandas
- Data Wrangling or munging
- Exploratory Data analysis
 - Data distribution
 - Handling the Outliers
 - Correlations among the variables in the datasets
- Data Visualization
 - Highlight the data distribution ,relationship, comparison and composition.
 - Finally creating the Dashboard

RESULTS



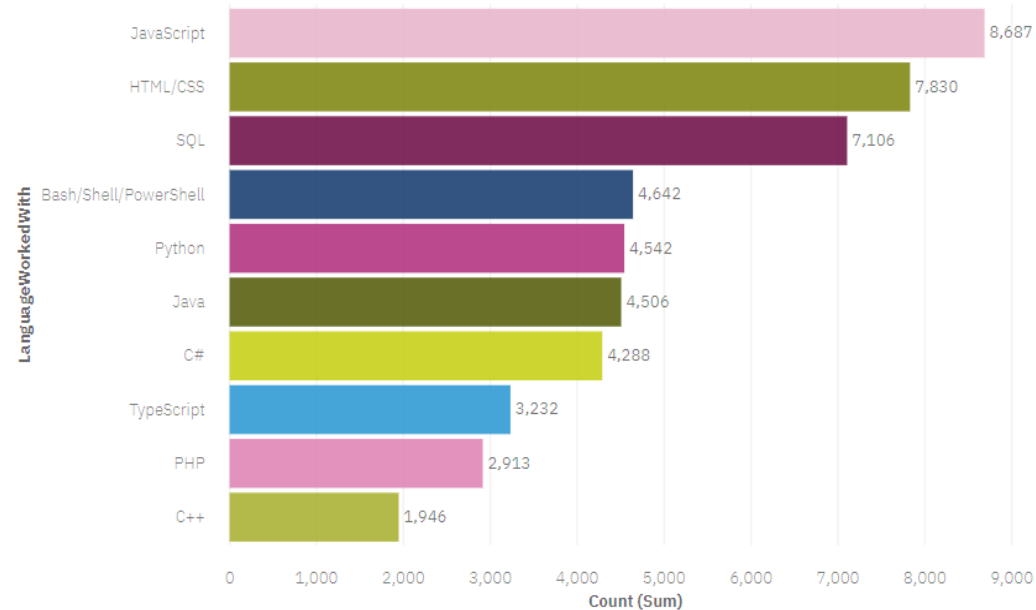
PROGRAMMING LANGUAGE TRENDS

Current Year

Top 10 Languages used

LanguageWorkedWith

● Bash/Shell/PowerShell ● C# ● C++ ● HTML/CSS ● Java
● JavaScript ● PHP ● Python ● SQL ● TypeScript

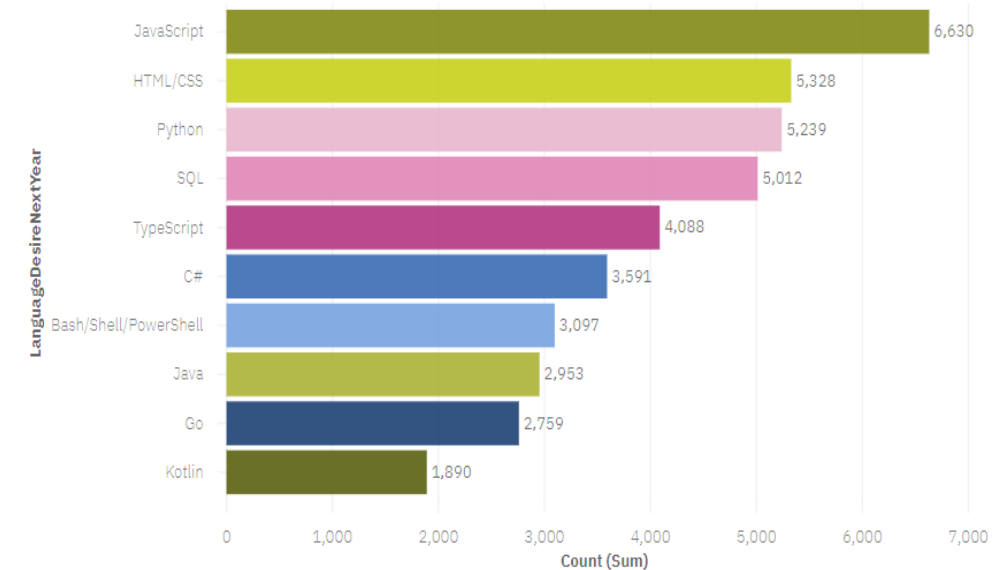


Next Year

Top 10 Languages desire next year

LanguageDesireNextYear - Count (Sum)

● Bash/Shell/PowerShell | 3,097 ● C# | 3,591 ● Go | 2,759
● HTML/CSS | 5,328 ● Java | 2,953 ● JavaScript | 6,630
● Kotlin | 1,890 ● Python | 5,239 ● SQL | 5,012
● TypeScript | 4,088



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript will remain still on top
- Python grows fast.
- TypeScript is among the developers interesting languages.

Implications

- Developers moves to Python
- And TypeScript
- Interest in PowerShell goes down

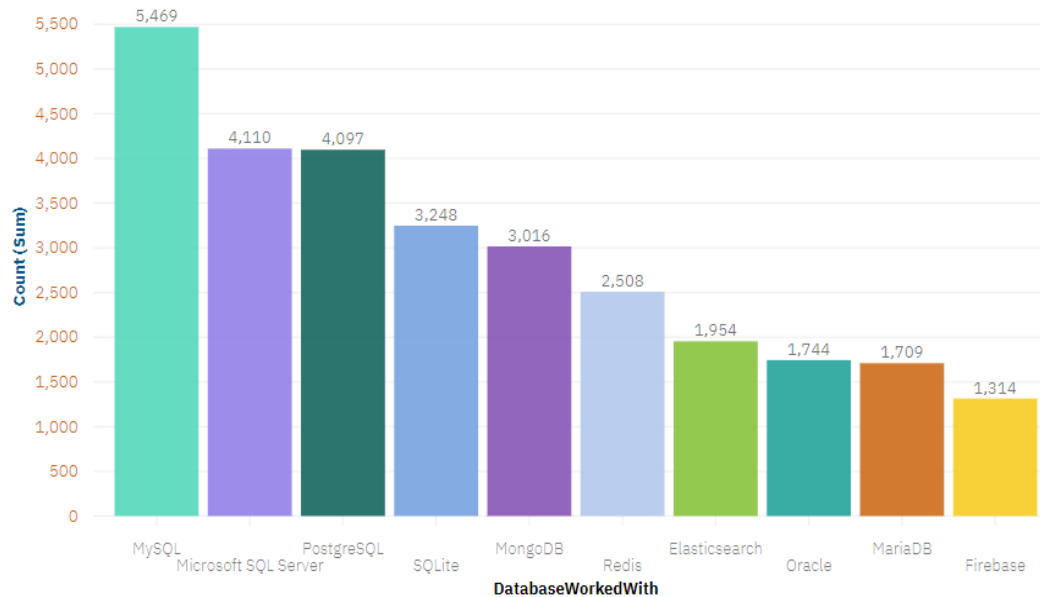
DATABASE TRENDS

Current Year

Top 10 Databases worked with

DatabaseWorkedWith

Elasticsearch Firebase MariaDB Microsoft SQL Server MongoDB
MySQL Oracle PostgreSQL Redis SQLite

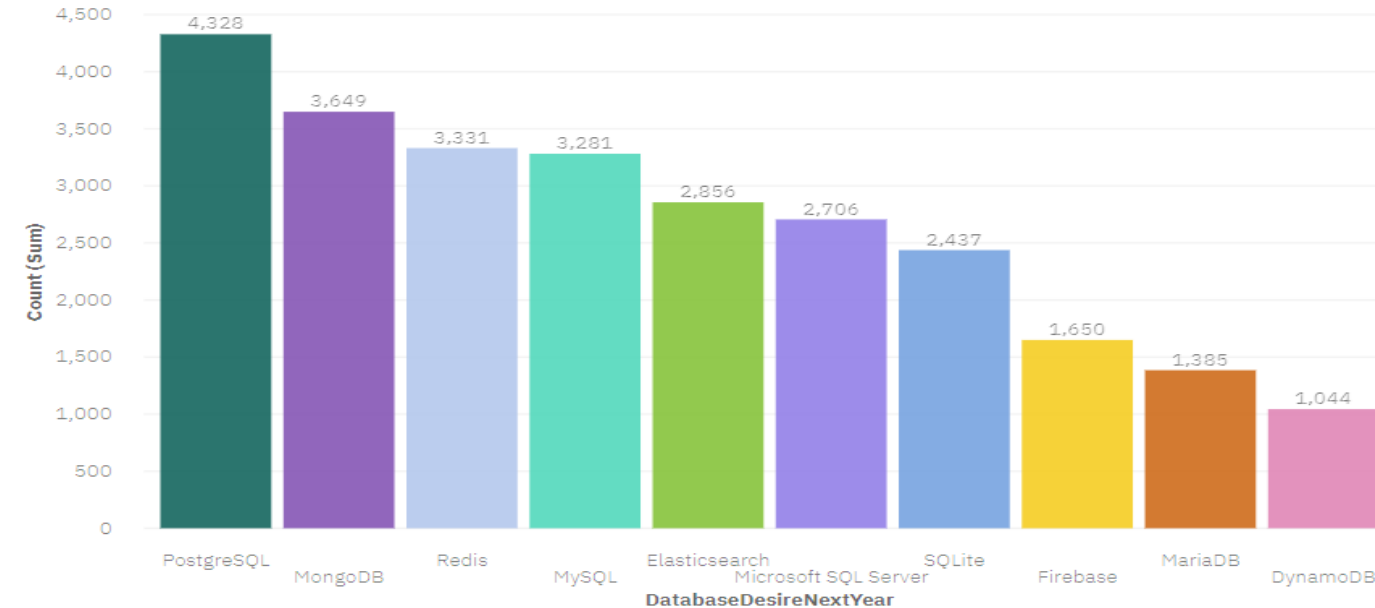


Next Year

Top 10 Database Desire next year

DatabaseDesireNextYear

SQLite Redis PostgreSQL MySQL MongoDB
Microsoft SQL Server MariaDB Firebase Elasticsearch DynamoDB



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is most used database
- Interest goes down for SQL Server and SQLite
- Interest for MongoDB and PostgreSQL going up

Implications

- PostgreSQL and MongoDB capture the market
- MS SQL Server and SQLite losing the market
- Oracle is out of top 10 in next year

DASHBOARD

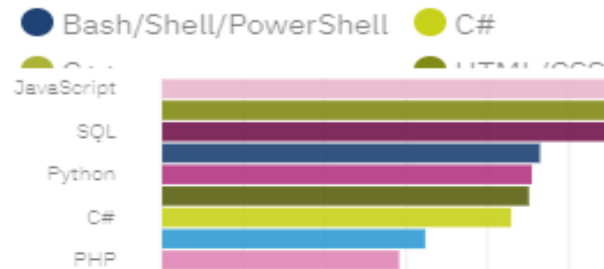


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Current Technology Usage

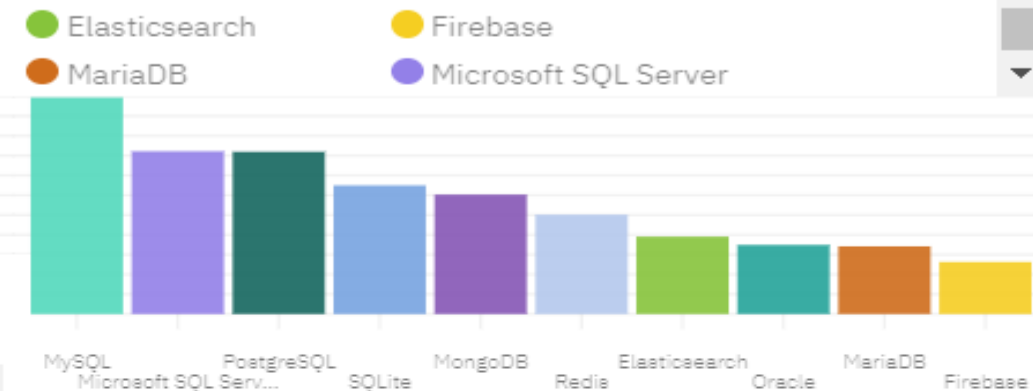
Top 10 Languages used

LanguageWorkedWith



Top 10 Databases worked with

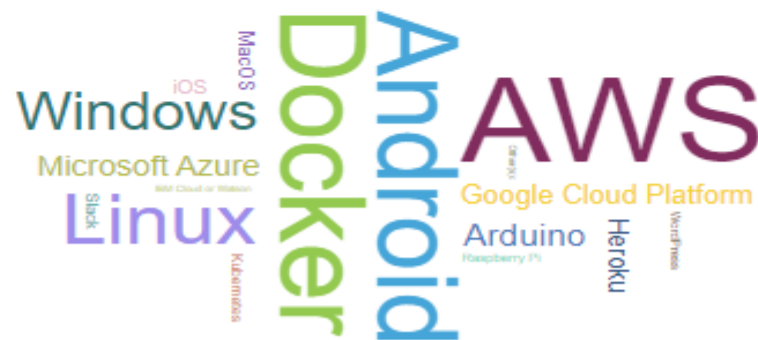
DatabaseWorkedWith



Platforms worked with

PlatformWorked...

blue
AWS



Count (Sum)



WebFrameWorkedWith

ASP.NET
Angular/Angular.js



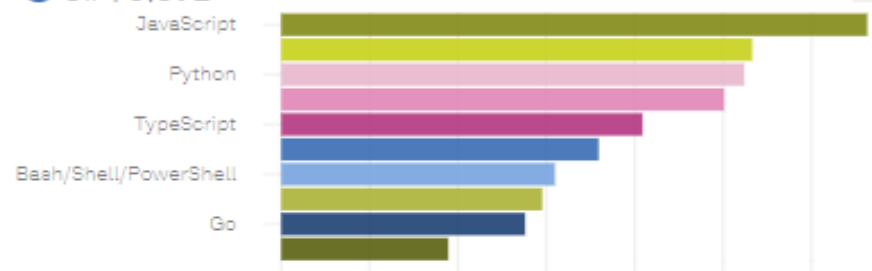
Future Technology Trend

Top 10 Languages desire next year

LanguageDesireNextYear - Count (Sum)

● Bash/Shell/PowerShell | 3,097

● C# | 3,591



Top 10 Platform Desire Next Year

Count (Sum)

Count (Sum)



Top 10 Database Desire next year

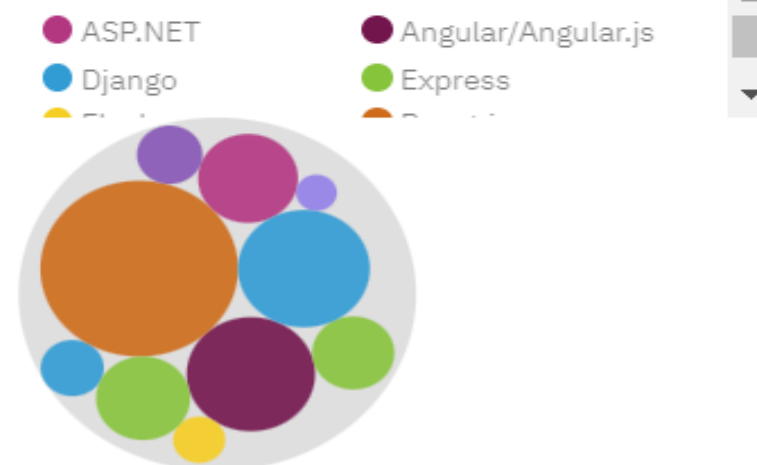
DatabaseDesireNextYear



Top 10 Web frame Desire Next Year

Count (Sum)

WebFrameDesireNextYear



Demographics

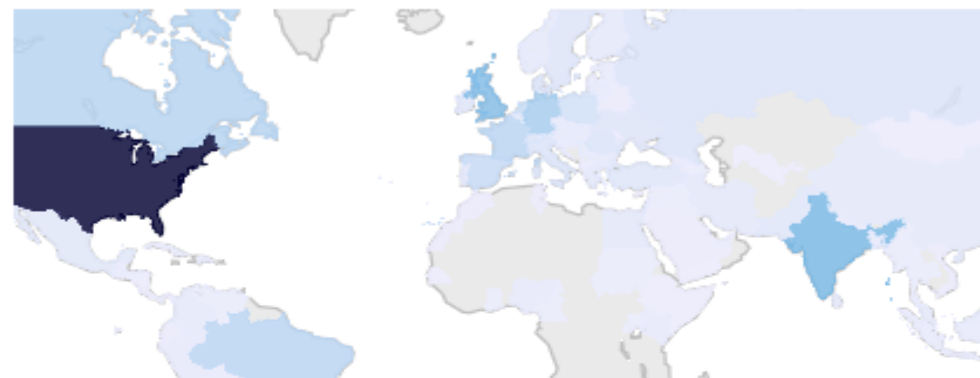
Respondent Classified by Gender

Gender

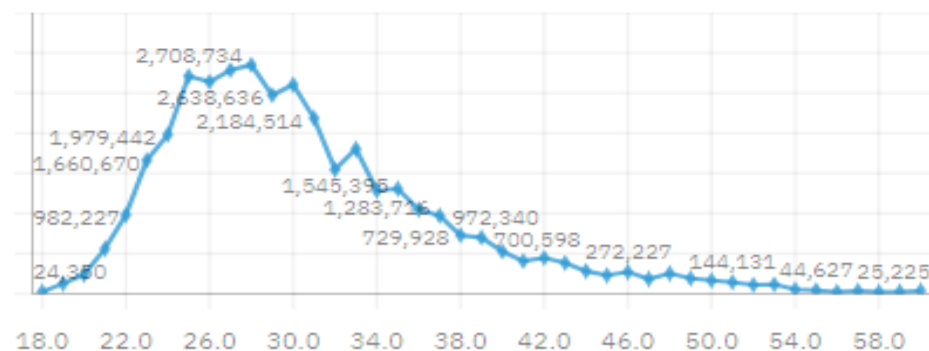
○ Woman ● Man



Respondent count by countries



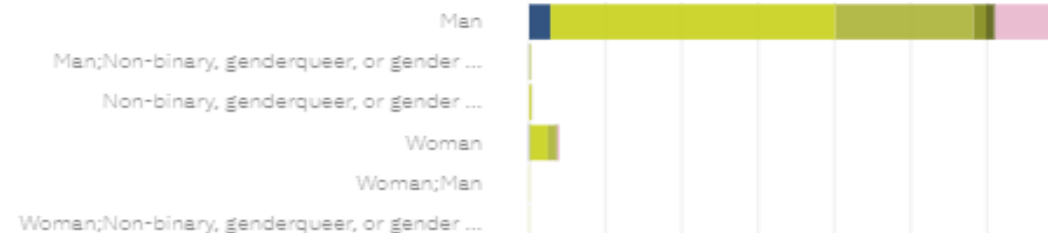
Respondent count by Age



Formal Education in Gender

EdLevel

● Associate degree
● Bachelor's degree (BA, BS, B.F)



DISCUSSION

- From the previous findings and research that Big data has future trend along with some advance programming languages.

OVERALL FINDINGS & IMPLICATIONS

Findings

- TypeScript getting popular
- JavaScript as used most
- More than 90% developers are young male

Implications

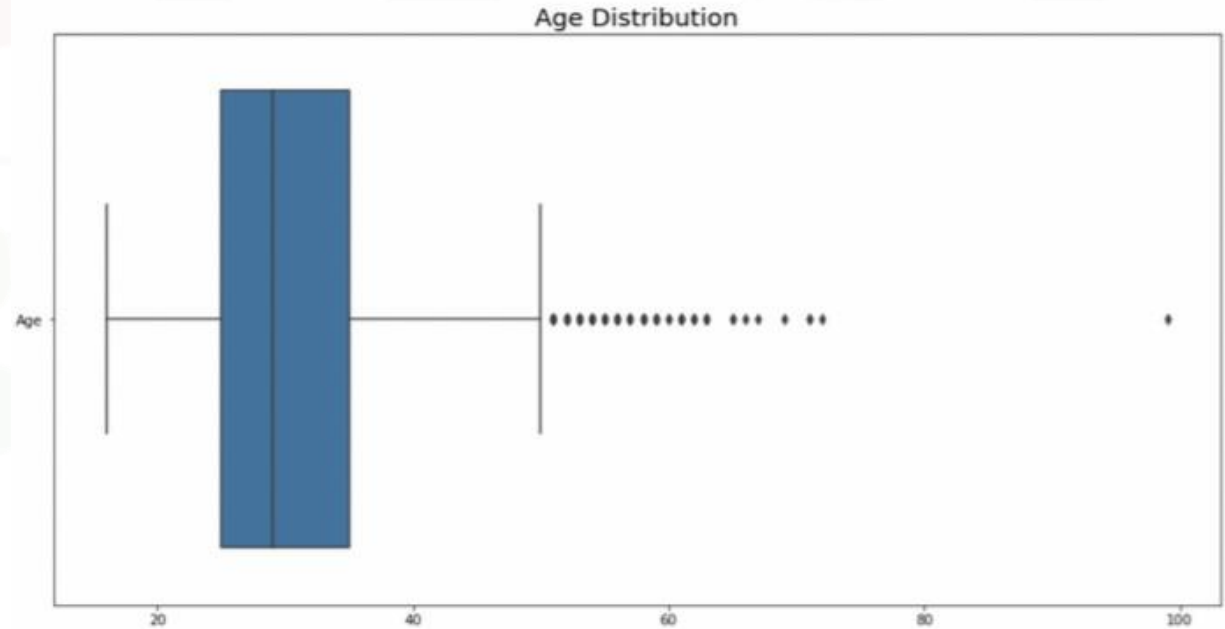
- TypeScript and JavaScript gain followers
- Less people have post graduate degree
- Globally Developers location and Gender

CONCLUSION

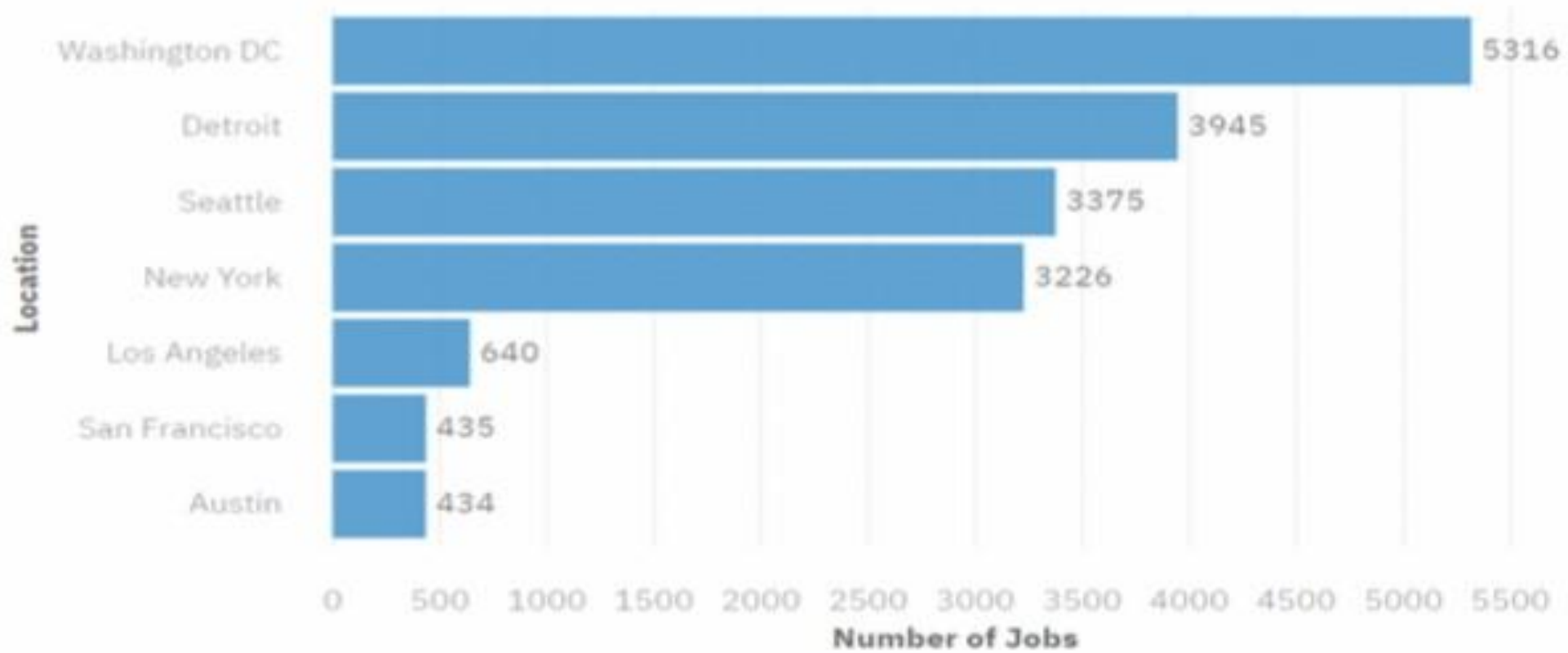


- Developers have very marked characteristics
- There is openly available jobs for people in IT sector with bright future
- Immerging technology going changed regularly
- Developers shows their interest among the new technologies

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

