



STACK OVERFLOW DEVELOPER SURVEY

LAKSHMI ANUSHA BAREDDY
NOVEMBER 2024

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
 - Data Analysis
 - Data Visualization
- Presenting The Results With Graphs and Trends
- Discussion of overall findings and Implications regarding the results previously exposed
- Final conclusions of carried out results

INTRODUCTION



- Stack Overflow's Annual Developer survey is the largest and most comprehensive survey of people who code around the world
- Results don't represent everyone in the developer community evenly
- Nearly 90,000 developers
 - Trends to predict where the developers are going
 - Characterization of developers around the globe

METHODOLOGY



- Collect survey data And Explore it's content
 - API's
 - Web Scraping
 - Requests Library
- Data Wrangling
- Exploratory Data Analysis
 - Analyzing Data Distribution
 - Handling Outliers
 - Correlations
- Data Visualization
 - Highlight Data Distribution, Relationships, The composition and Comparison Of Data
- Dashboards

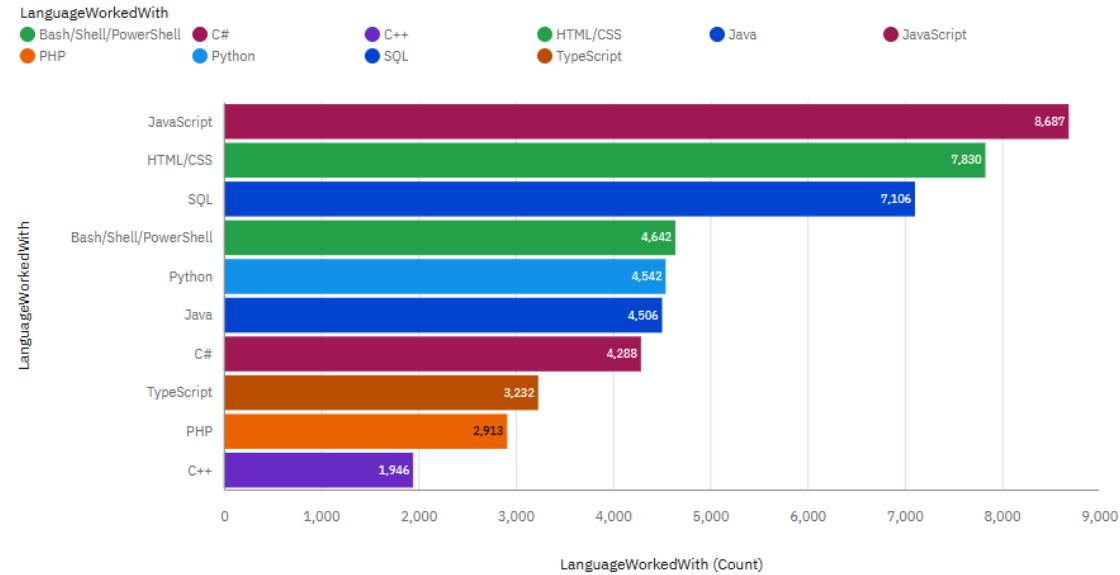
RESULTS



PROGRAMMING LANGUAGE TRENDS

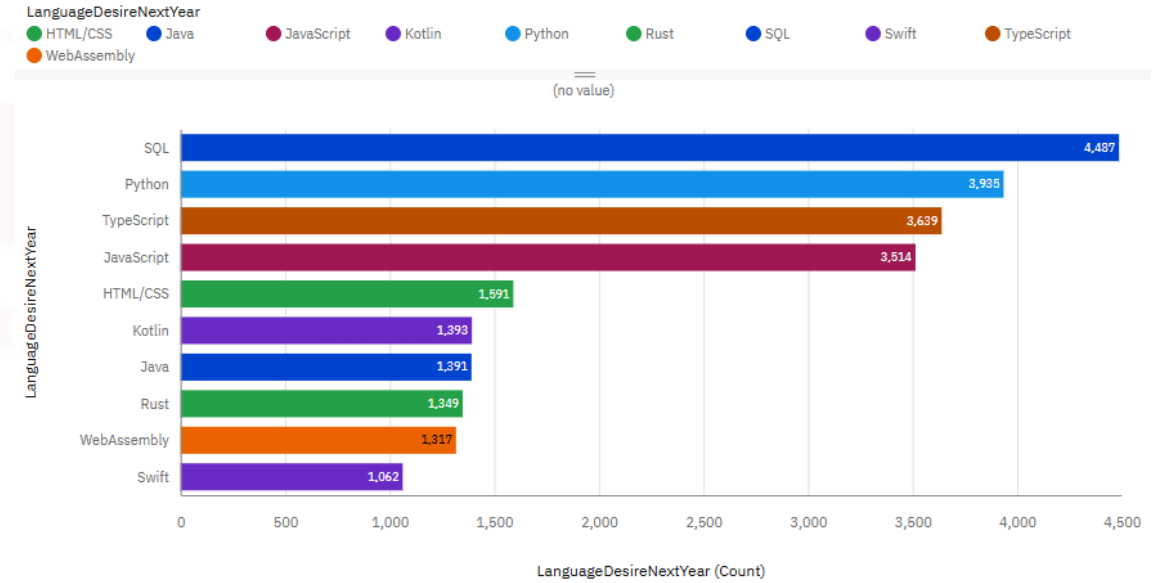
Current Year

Top 10 Languages WorkedWith



Next Year

Top 10 LanguageDesireNextYear



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Python Is Fast Growing Programming Language
- SQL seems to be desired leading Language
- Increased demand in TypeScript

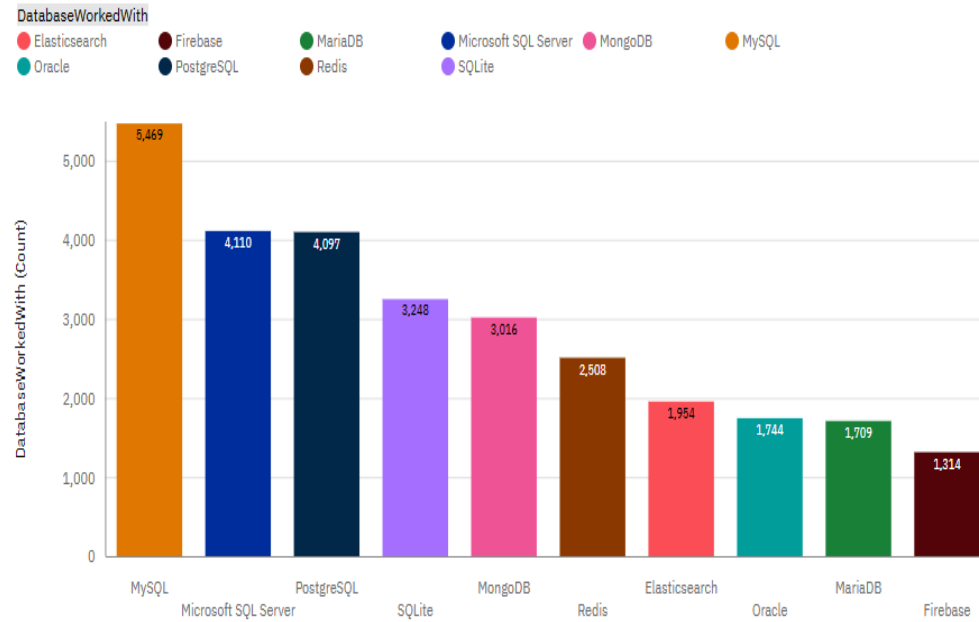
Implications

- Possible developers migration from JavaScript to TypeScript

DATABASE TRENDS

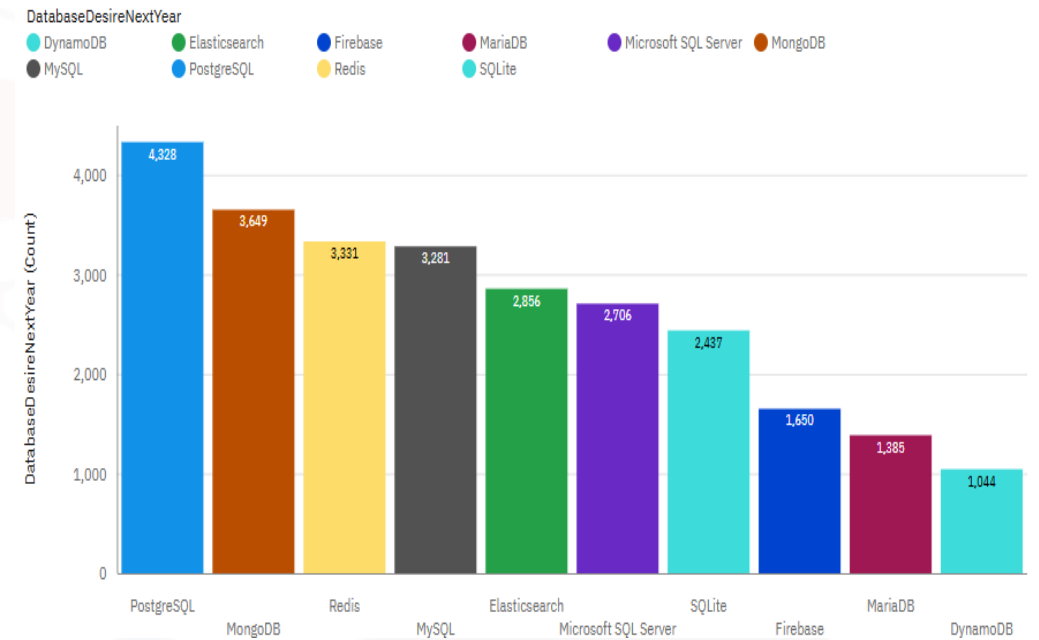
Current Year

Top 10 Database WorkedWith



Next Year

Top 10 Database DesireNextYear



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL as most used database
- Increasing Interest in PostgreSQL And MongoDB

Implications

- PostgreSQL and MongoDB Establishment in the Market
- Microsoft SQL Server and SQLite losing ground in The market
- Implication 3

DASHBOARD

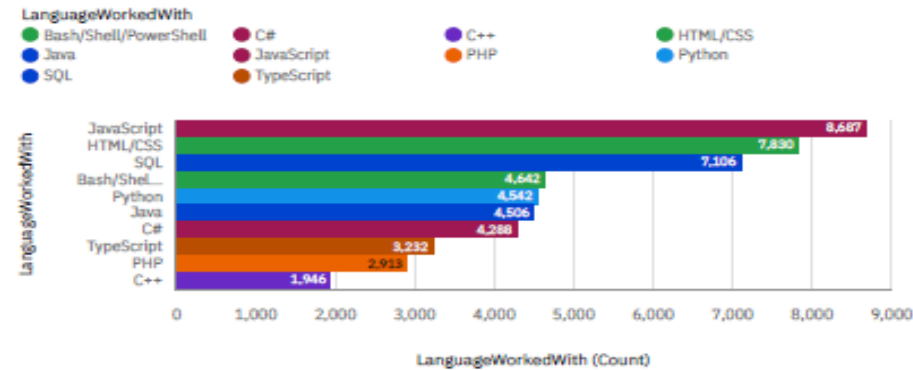


<https://github.com/Rugghant/Dashboard-IBM-cognos-Analytics>

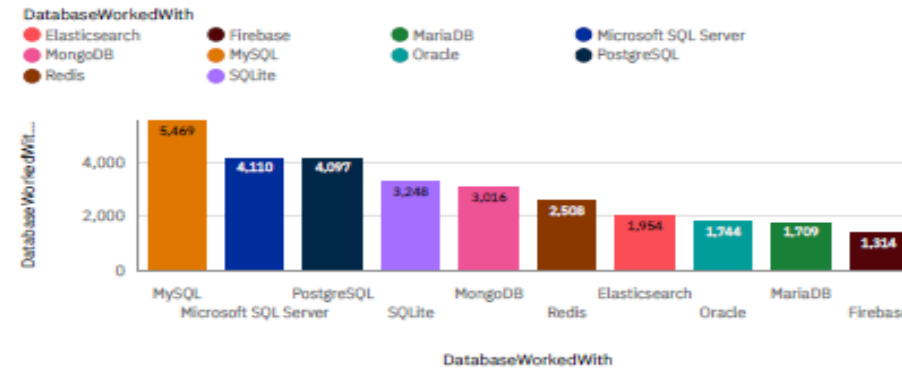
DASHBOARD TAB 1

Current Technology Usage

Top 10 Languages WorkedWith



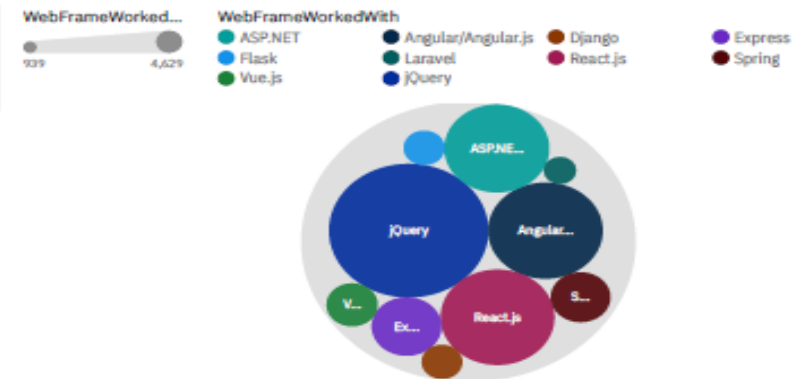
Top 10 Database WorkedWith



PlatformWorkedWith



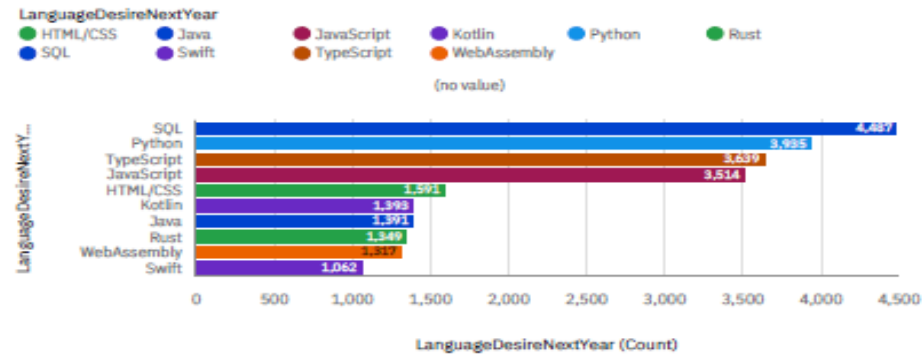
Top 10 WebFrameWorkedWith



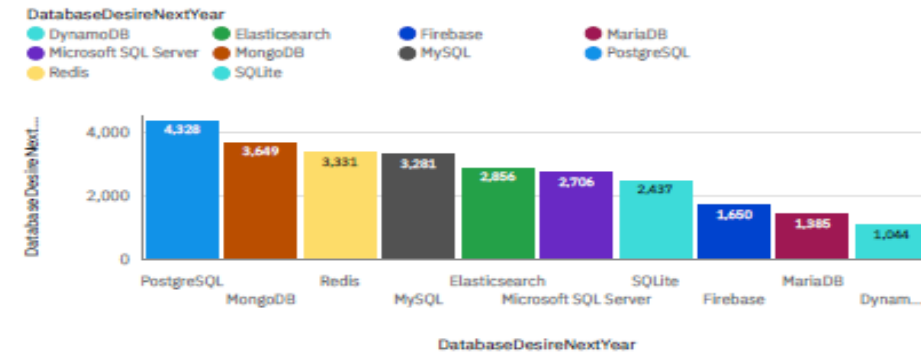
DASHBOARD TAB 2

Future Technology Trend

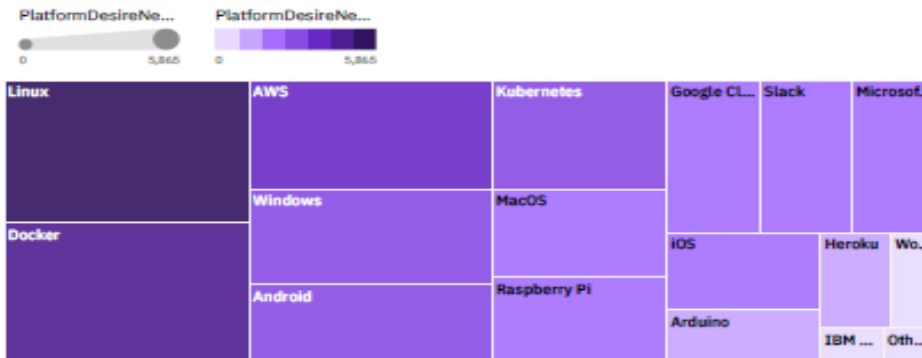
Top 10 LanguageDesireNextYear



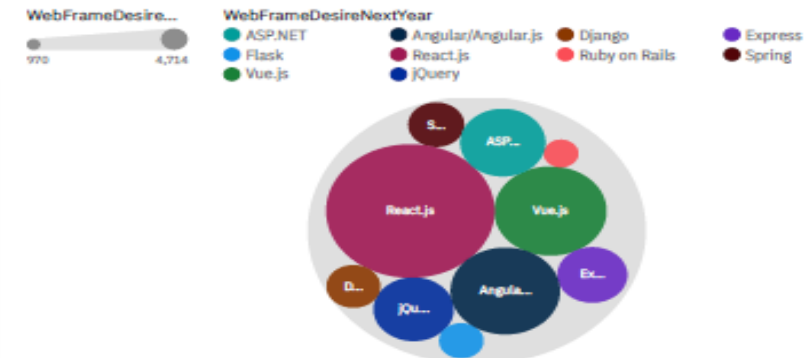
Top 10 DatabaseDesireNextYear



PlatformDesireNextYear



Top 10 WebFrameDesireNextYear

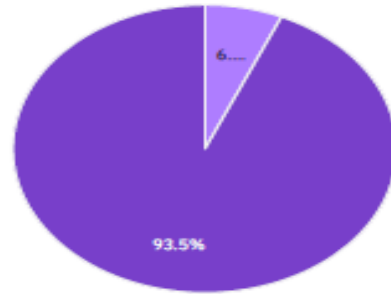


DASHBOARD TAB 3

Demographics

Respondents Classified By Gender

Gender
Woman Man

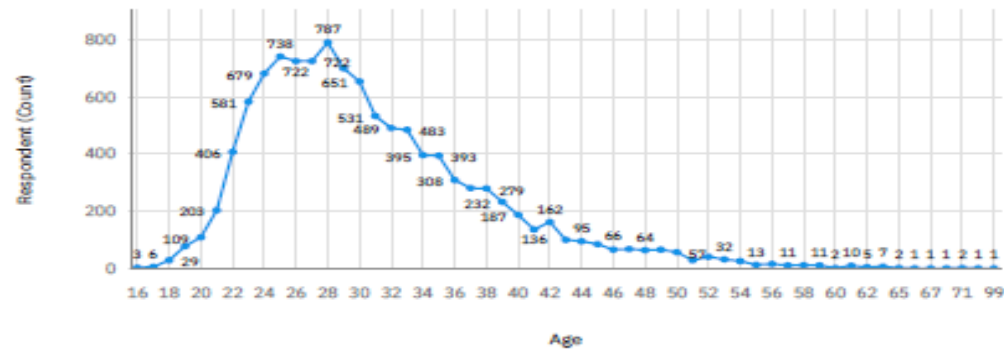


Respondents Count For Countries

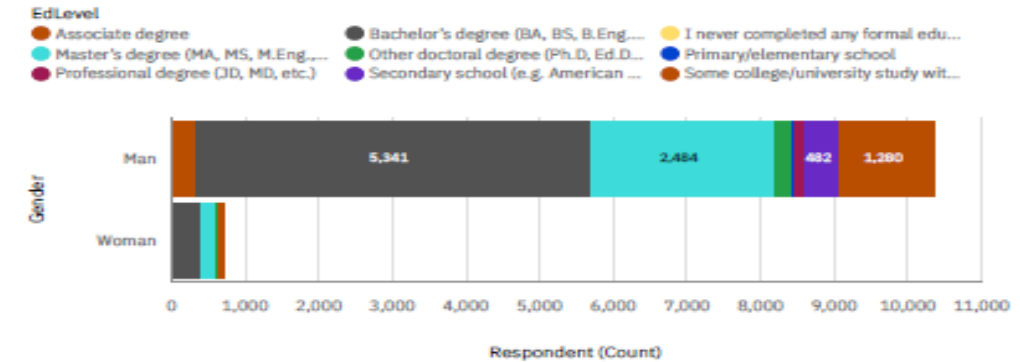
Respondent (Count)
1 3,127



Respondent Count By Age



Respondent Count By Gender Classified By Education Level



DISCUSSION



OVERALL FINDINGS & IMPLICATIONS

Findings

- Developers Mostly Located in Developed Countries
- Over 90% young male developers
- JavaScript Widely used and TypeScript getting popular

Implications

- Young developers without postgrad studies on its majority
- Global polarization of developers Regions and Gender

CONCLUSION

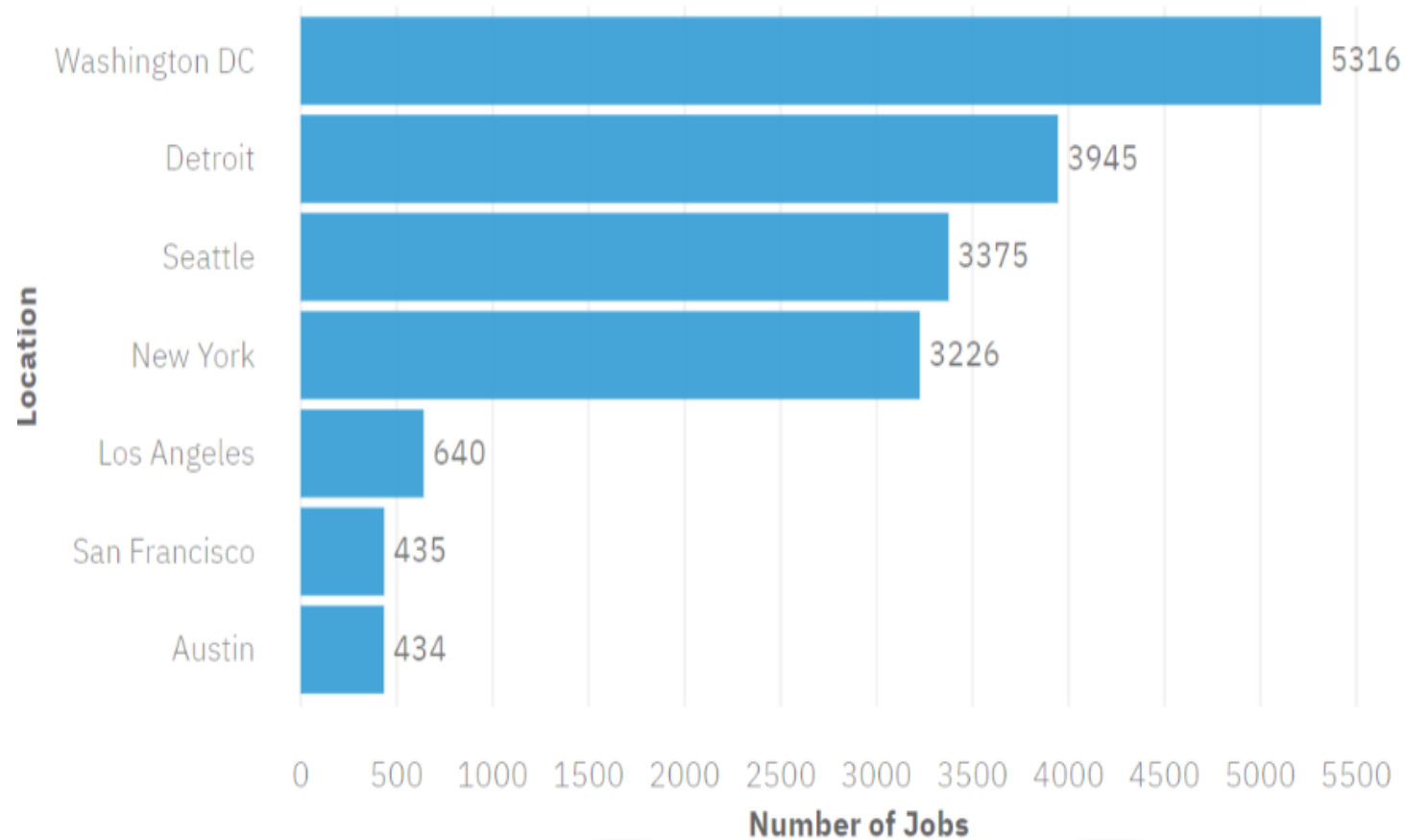


- A good idea of popularity trends of different tools, platforms and languages can be obtained
- There is a job to be done to spread accessibility of this labor market to countries in development

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES

