STACK OVERFLOW DEVELOPER SURVEY 2019

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OUTLINE

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

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EXECUTIVE SUMMARY

- Data contextualization and analysis goal,

- Methodology description:
  - Data gathering
  - Data analysis
  - Data visualisations

- Results presentation supported with graphs and trends

- Discussion of overall findings and implications regarding the results previously exposed

- Final conclusions of the carried out research

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

- Almost 90,000 devs

- Trends to predict where the developers are going

- Characterization of developers around globe

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METHODOLOGY

- Collect survey data & explore its content
- Data wrangling
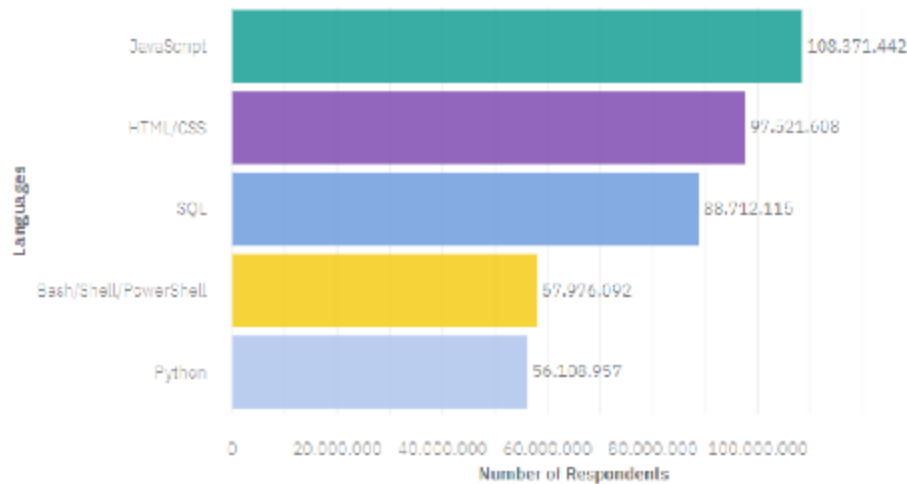- Exploratory data analysis
- Data visualization
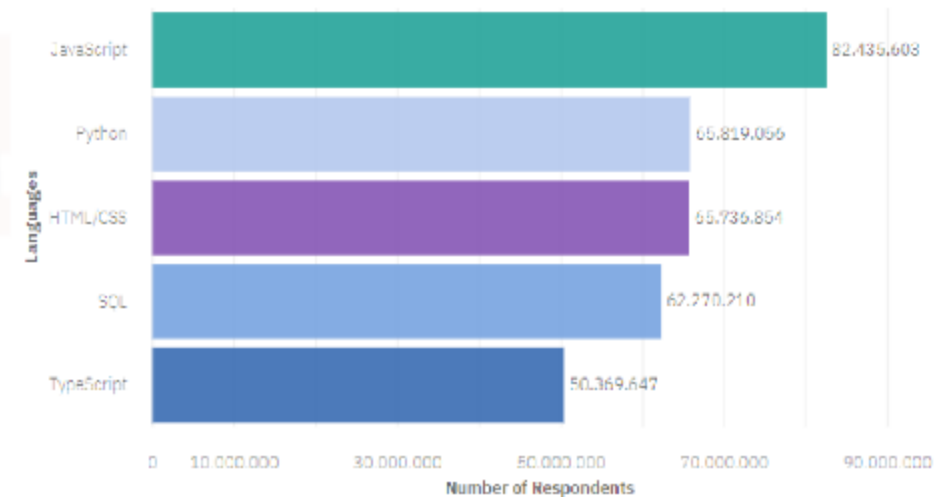- Dashboards

RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year

Next Year

Top 5 Programming Language Experience

Language	Number of Respondents
JavaScript	108.371.442
HTML/CSS	97.521.608
SQL	88.712.115
Bash/Shell/PowerShell	57.976.092
Python	56.108.957

Top 5 Desired Language to Learn

Language	Number of Respondents
JavaScript	82.435.608
Python	65.819.055
HTML/CSS	55.735.854
SQL	62.270.210
TypeScript	50.369.647

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- Javascript seems to keep as leading language

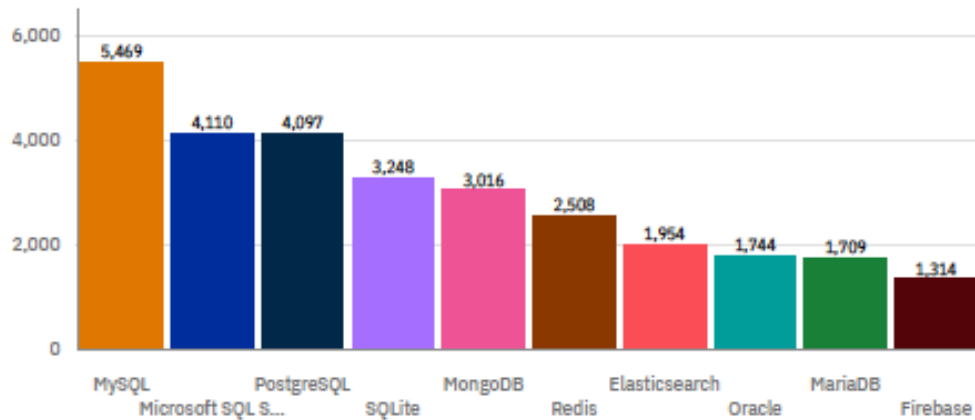- Python fastest-growing

- Big interest in TypeScript

Implications

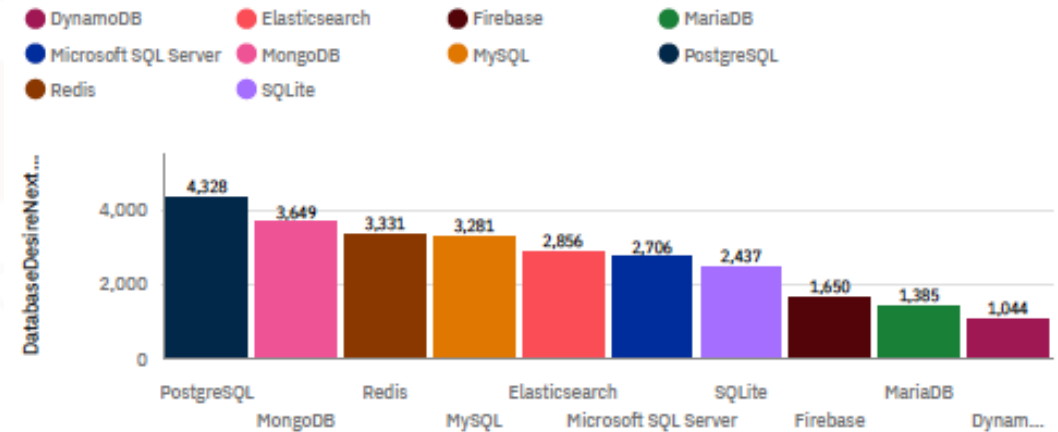- Possible devs migration from Java to TypeScript

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DATABASE TRENDS

Current Year

Top 10 Database Worked With

Next Year

Top 10 Database Desire Next Year

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL most used database
- Increasing interest in PostgreSQL
- Lack of interest in Microsoft SQL Server

Implications

- PostgreSQL and BongoDB establishment in the market
- Microsoft SQL Server and SQLite losing interest

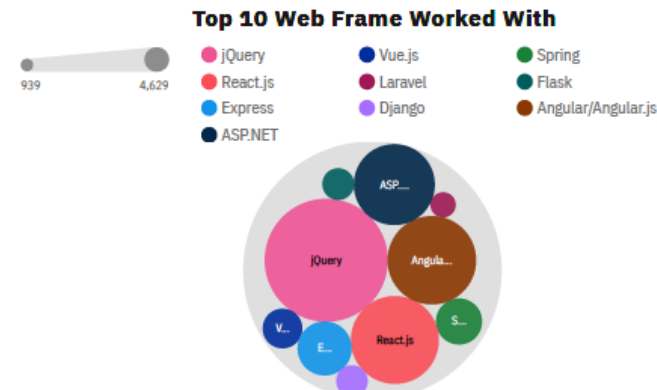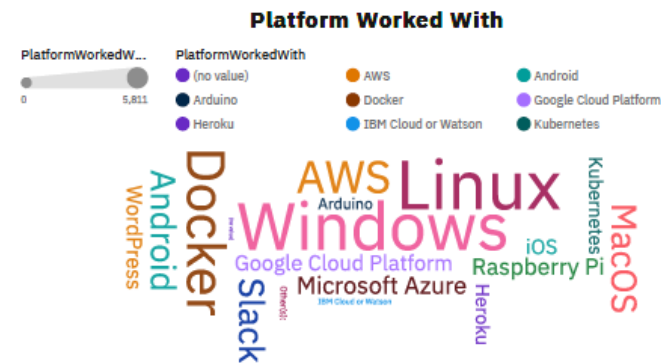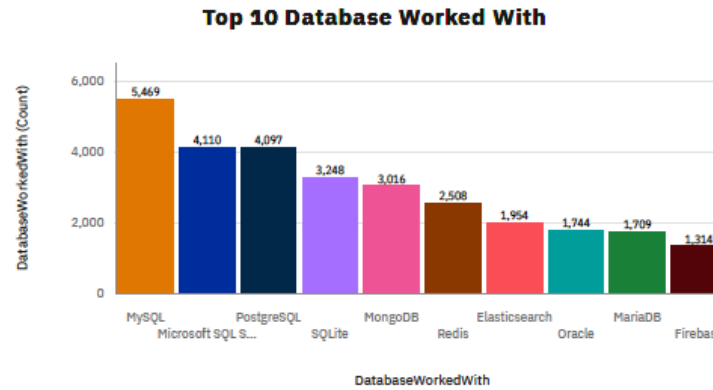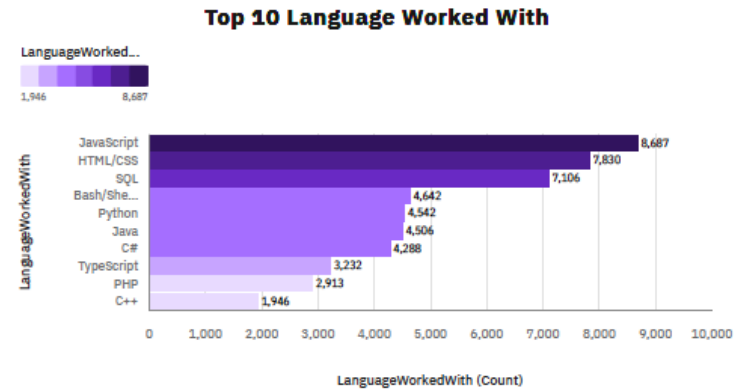IBM **Developer**

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DASHBOARD

https://github.com/moscinskax/Capstone_Project_IBM/blob/main/Dashboards_on_Cognos.pdf

DASHBOARD TAB 1

DASHBOARD TAB 2

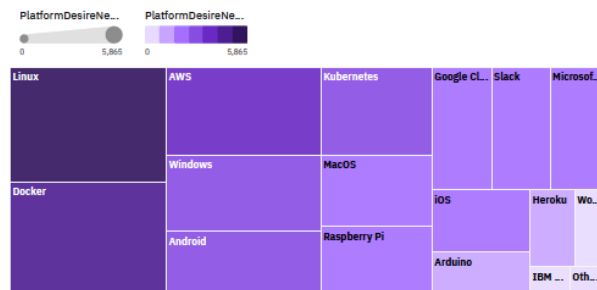Future Technology Trend

Top 10 Language Desire Next Year

- TypeScript
- SQL
- Python
- Kotlin
- JavaScript
- Java
- HTML/CSS
- Go
- C#
- Bash/Shell/PowerShell

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

LanguageDesireNextYear (Count)

Top 10 Database Desire Next Year

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

PostgreSQL	4,328
MongoDB	3,649
Redis	3,331
MySQL	3,281
Elasticsearch	2,856
Microsoft SQL Server	2,706
SQLite	2,437
Firebase	1,650
MariaDB	1,385
Dynam...	1,044

DatabaseDesireNextYear

Platform Desire Next Year

PlatformDesireNe...   0 — 5,865
PlatformDesireNe...   0 — 5,865

Linux, AWS, Kubernetes, Google Cl..., Slack, Microsof..., Docker, Windows, MacOS, iOS, Heroku, Wo..., Android, Raspberry Pi, Arduino, IBM..., Oth...

Top 10 Web Frame Desire Next Year
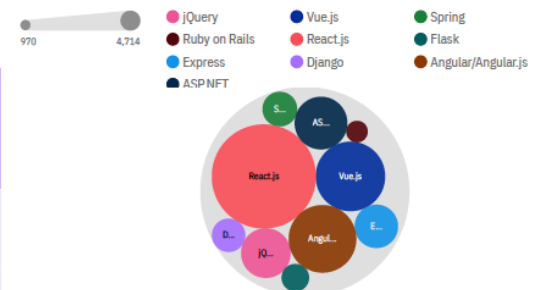
- jQuery
- Vue.js
- Spring
- Ruby on Rails
- React.js
- Flask
- Express
- Django
- Angular/Angular.js
- ASP.NET

970 — 4,714

React.js, Vue.js, Angul..., jQ..., D..., AS..., S..., E...

DASHBOARD TAB 3
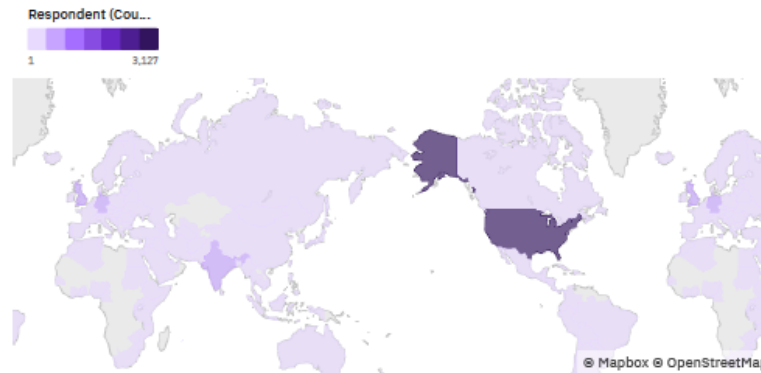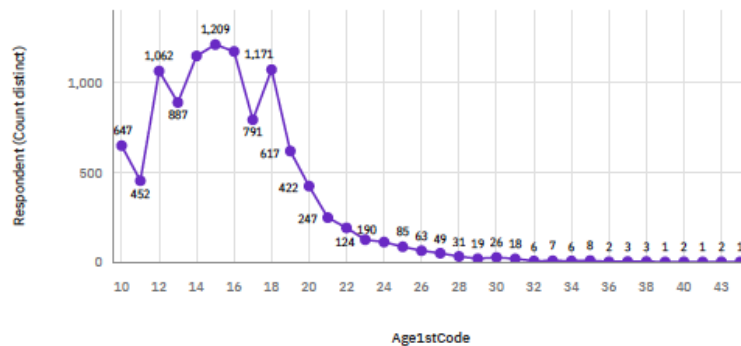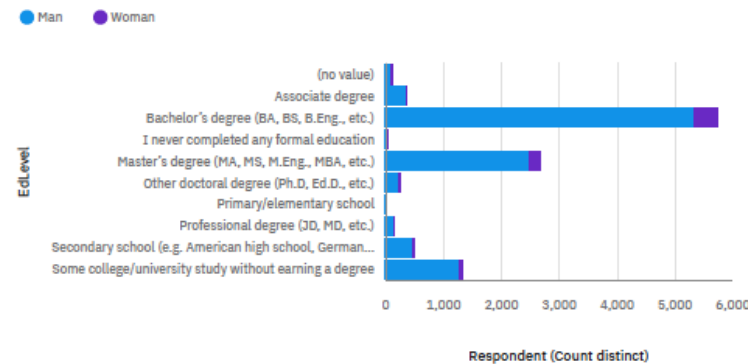
DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- Javascript widely used and Typescript getting popular

- Over 90% young male devs

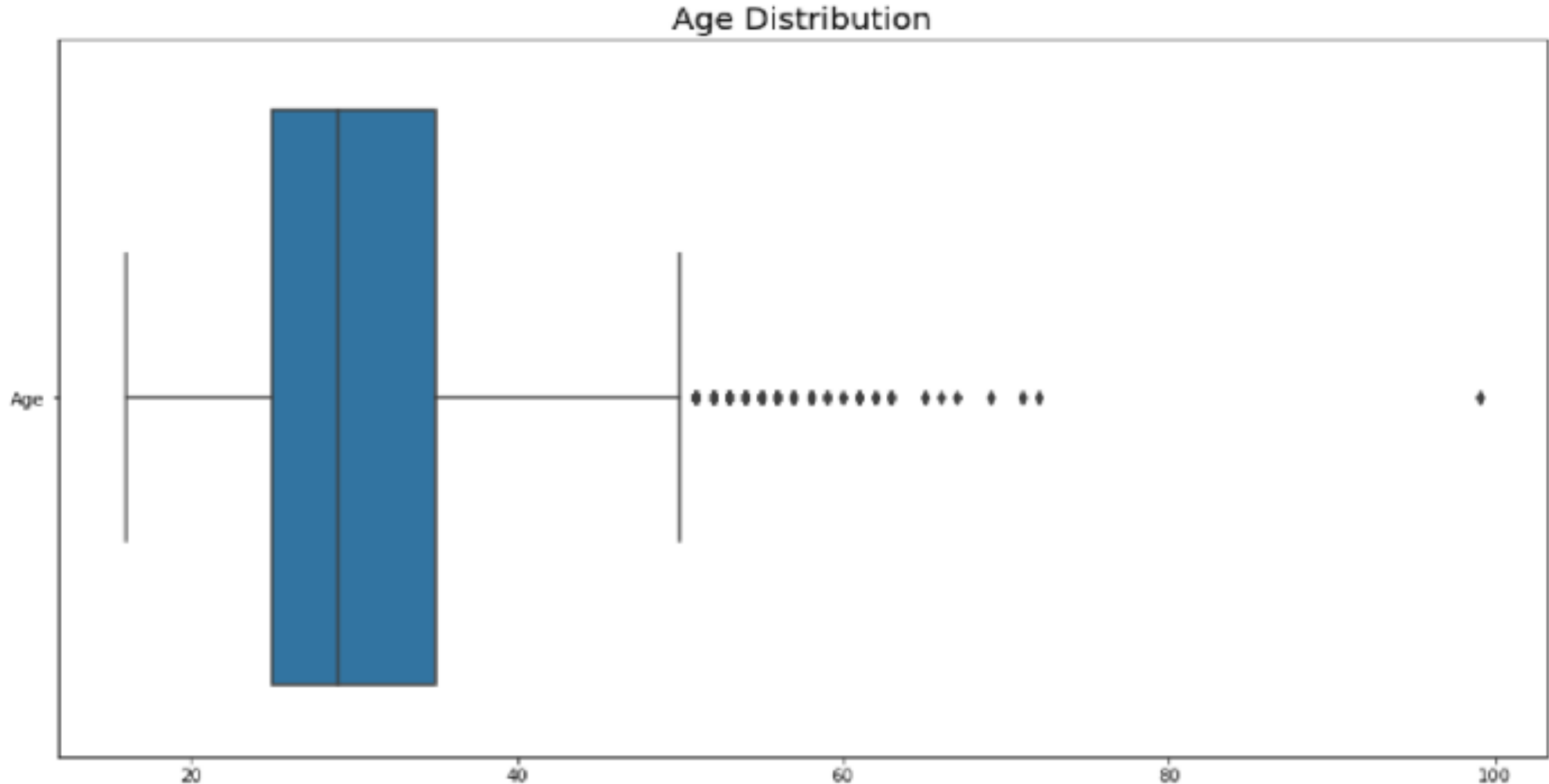- Devs mostly located in developed countries

Implications

- JavaScript and TypeScript web frames gaining followers

- Global polarization of devs location and gender

- Young devs without postgrad studies on its majority

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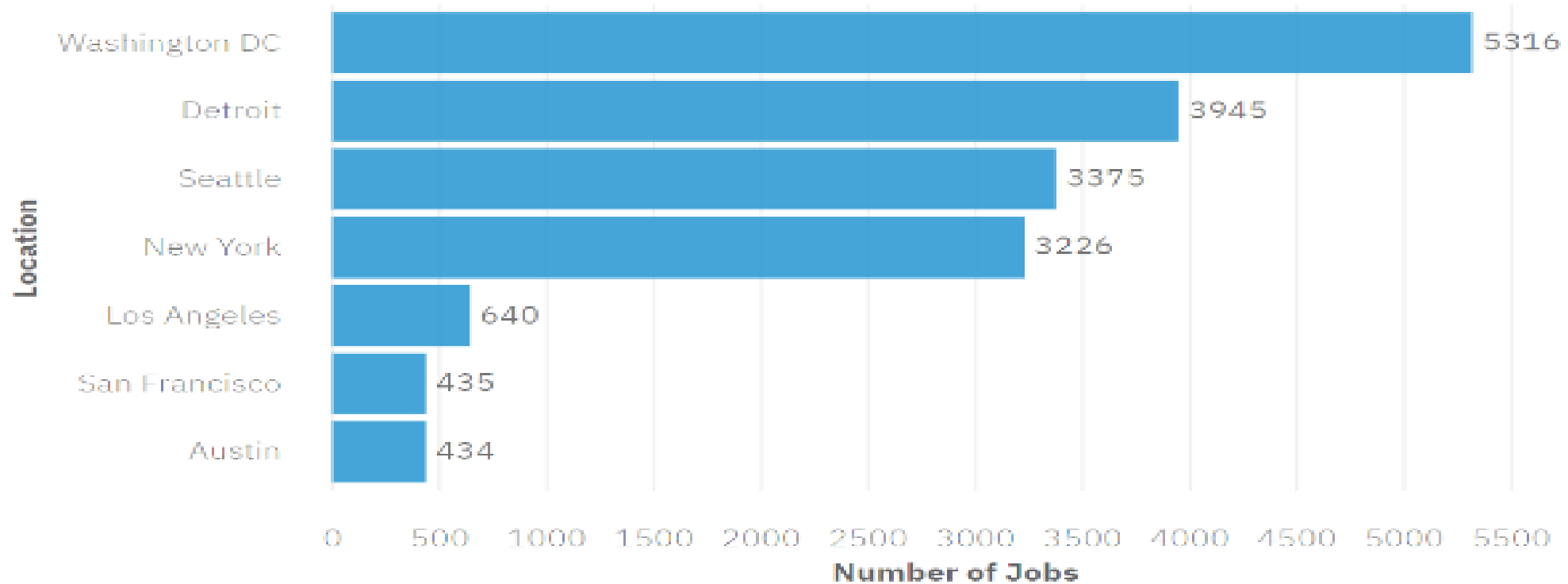**SKILLS NETWORK**

CONCLUSION

- Devs are people with very marked characteristics,

- 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 counties in development

AGE DISTRIBUTION BOXPLOT

Age Distribution

JOB POSTINGS

POPULAR LANGUAGES