STACK OVERFL(DEVELOPER SUI 2019

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October 15/2023

IBM DevLICDer

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OUTLINE

- Executive Summary
- Introduction
- ¹ᵥ¹ethc lology
- Results
  - Visualization - Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

EXECUTIVE SUMMARY

- Data contextualization and analysis goal.
- Methodology description.
  - Data gathering.
  - Data analysis.
  - Data visualizations.
- Results presentation supported with graphs and
- Discussion of overall findings and implications re the results previously exposed.
- Final conclusions of the carried out research.

INTRODUCTION

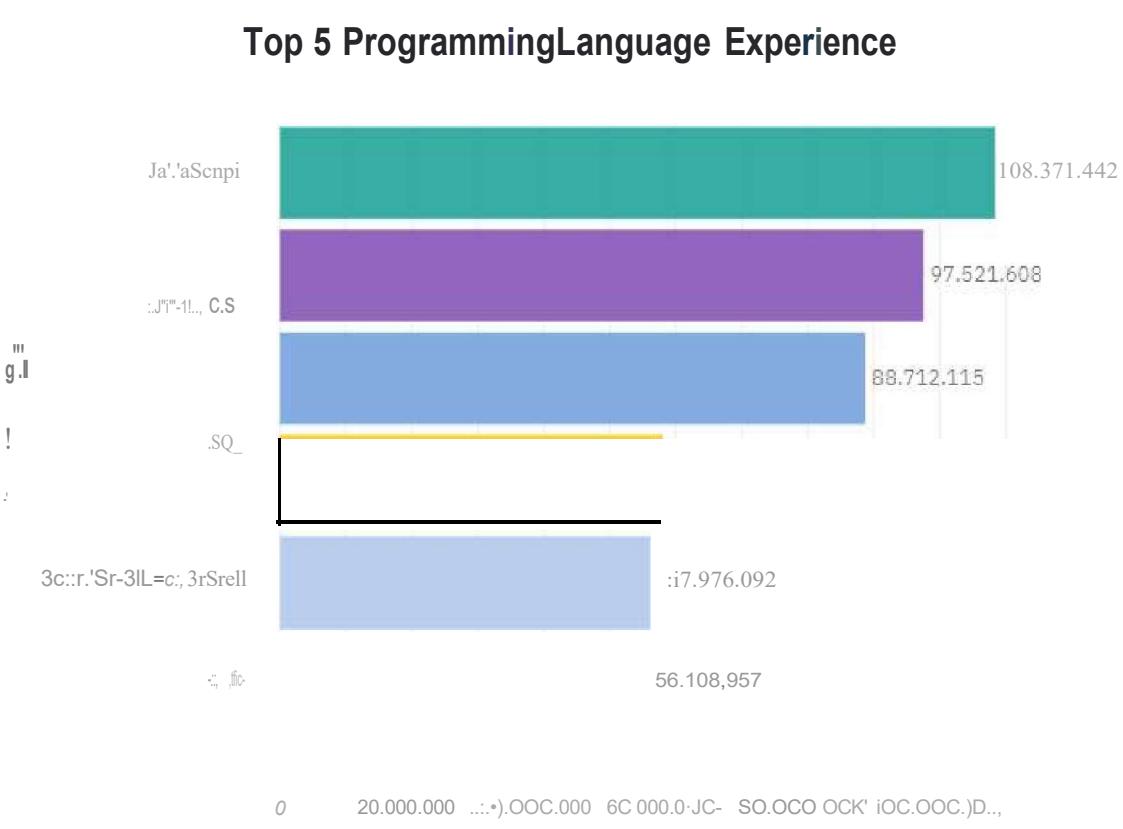
- Stack Overflow's annual Developer Survey is the and most comprehensive survey of people who around the world.
- Results don't represent everyone in the develop, community evenly.
- Nearly 90,000 developers.
- Trends to predict where the developers are goin
- Characterization of developers around the globe

METHODOLOGY

- Collect survey data & explore its content
  - Web Scraping
  - APIs.
  - Request library.
- Data Wrangling
- Exploratory data analysis
  - Analyzing data distribution.
  - Handling outliers.
  - Correlations.
- Data Visualization
  - Highlight distribution of data, relationships, the compc comparison of data.
- Dashboards

PROGRAMMING LANGUAGE TRENDS

Current Year



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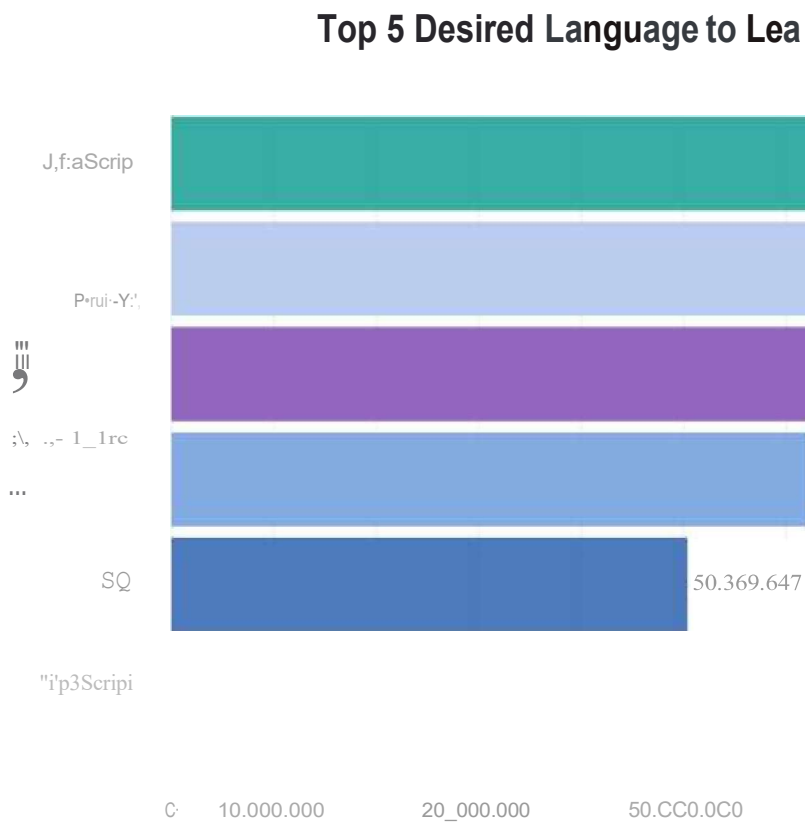

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Number of Respondents

Number of Respondents

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PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

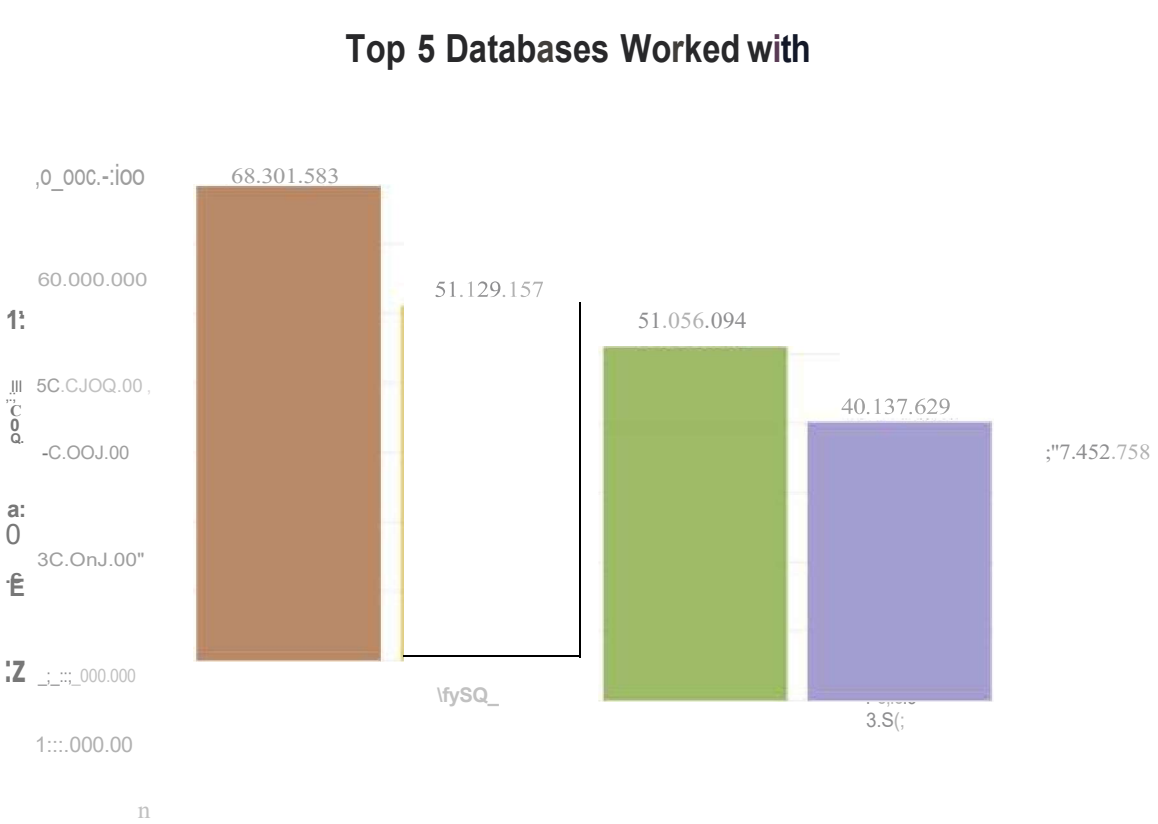
- JavaScript seems to keep as leading language.
- Python fastest-growing.
- Great interest in Typescript

Implications

- Possible developers migr from JavaScript to TypeS(

DATABASE TRENDS

Current Year



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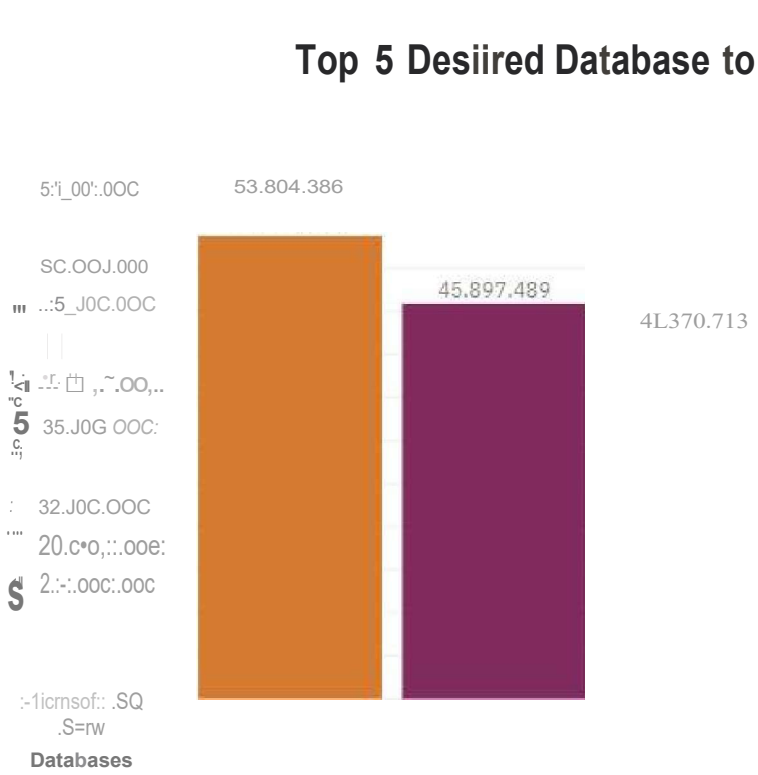

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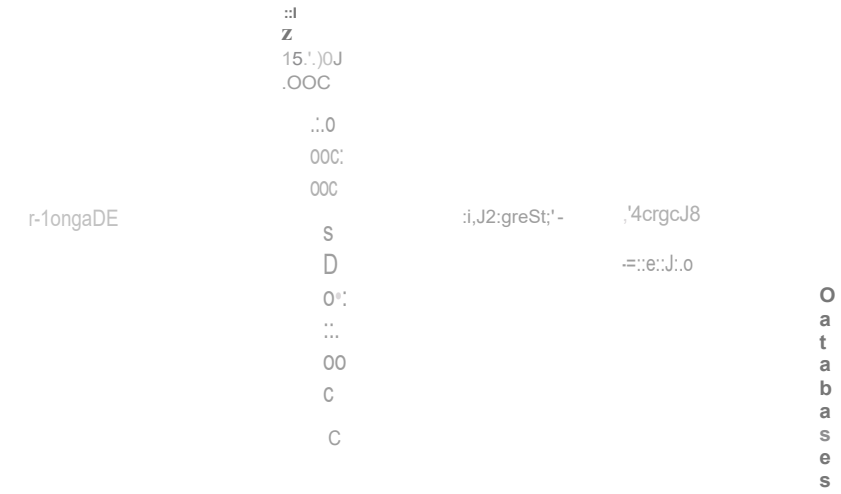

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DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL as most used database.
- Lack of interest in Microsoft SQL Server and SQLite.
- Increasing interest in PostgreSQL and MongoDB.

Implications

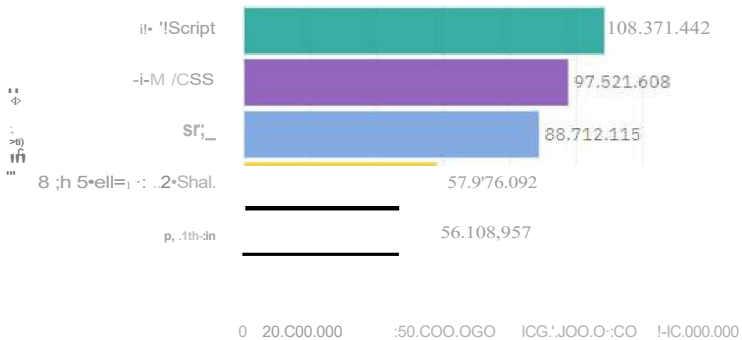
- Microsoft SQL Server and
  losing ground in the mar
- PostgreSQL and MongoD
  establishment in the mar

DASHBOARD

htt ps://dataplatform.cloud.ibm.com/dashboards/380a93e5-f4al-4e4d-9841-4966b65d676b/view/4c21el7d12b36af74bfcc0e407cf7a0f7d35250fbabb8456d6d77b490a327397f33b1590c87cld5b89130561a5bf110acc

CURRENT TECHNOLOGY USAGE

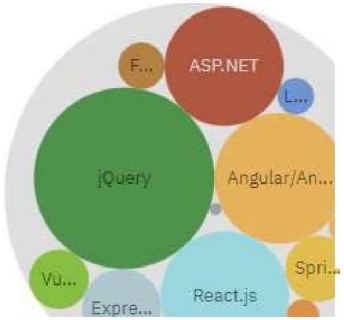
Top 5 Programming Language Experience



Top 5 Databases Worked with

Platforms !Interacted

Top 10 WebFrames Used



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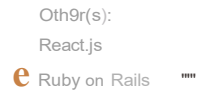

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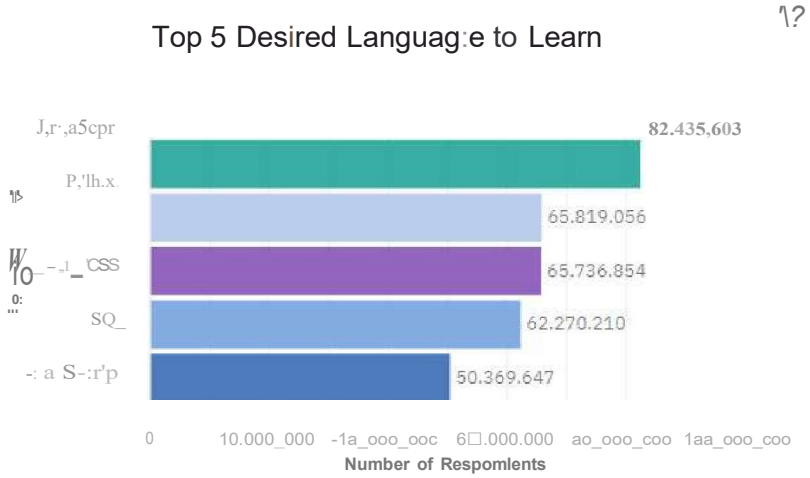
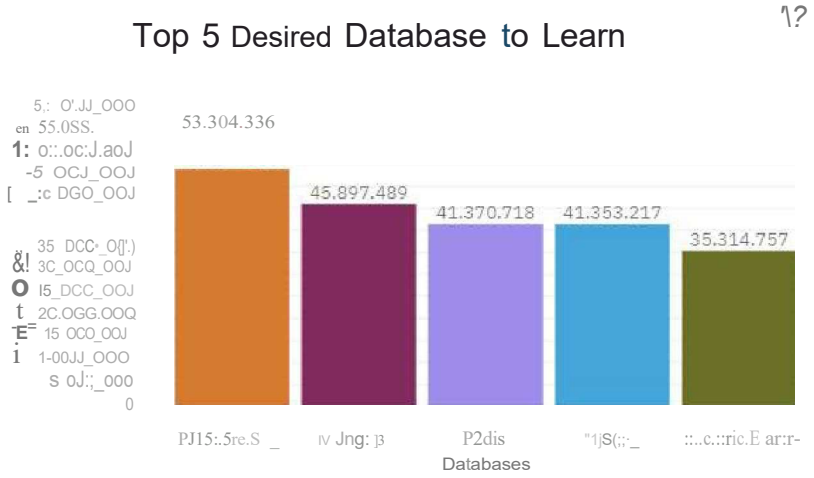
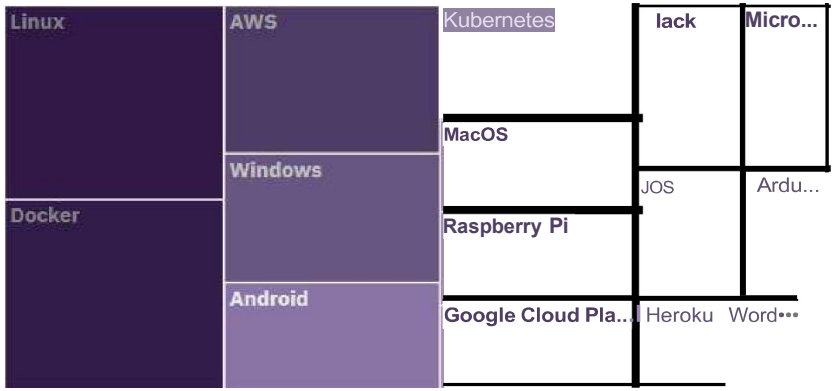
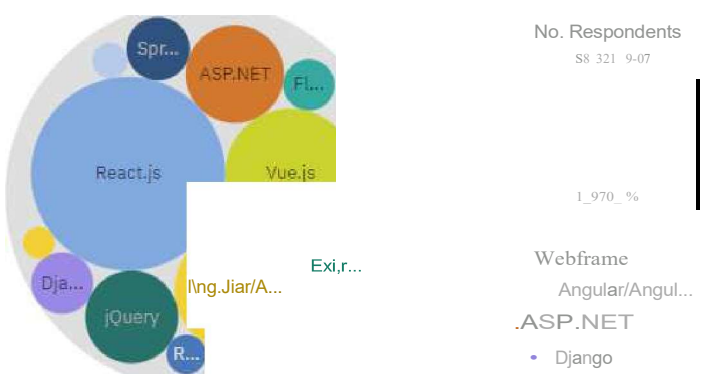
FUTURE TECHNOLOGY TREND









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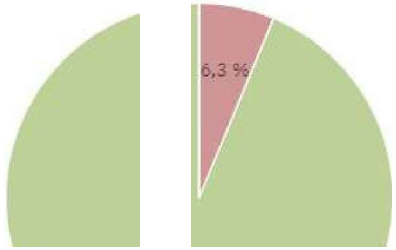
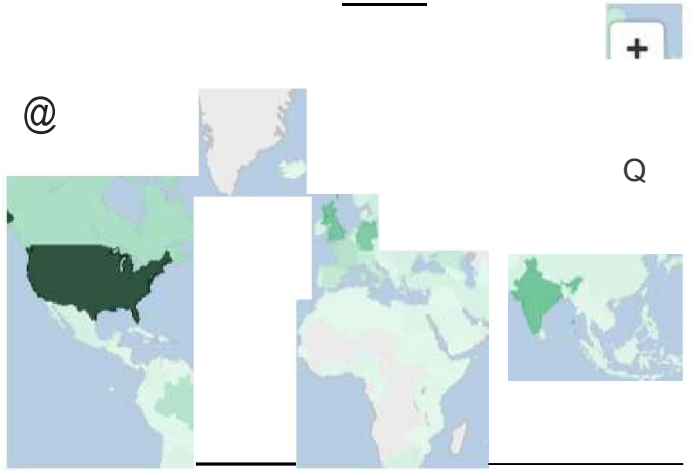
DEMOGRAPHICS

Respondent by Gender

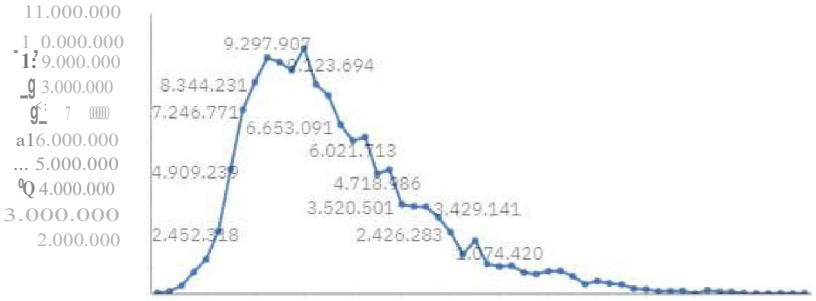


Gender
ewoman
Man

Respondent Locations



Respondent by Age



Formal Education Level / Gender

Edlevel
Assocme degree
Bachelor's degree
I never complete..
Master's degree
Other doctoral de.
Primary/eleme,ma
Professional dEJ"gr..

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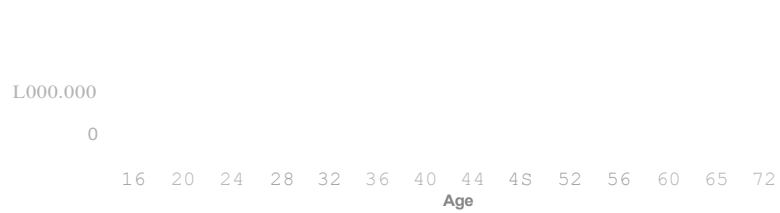

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e Some college/um..

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OVERALL FINDINGS & IMPLICATION

Findings

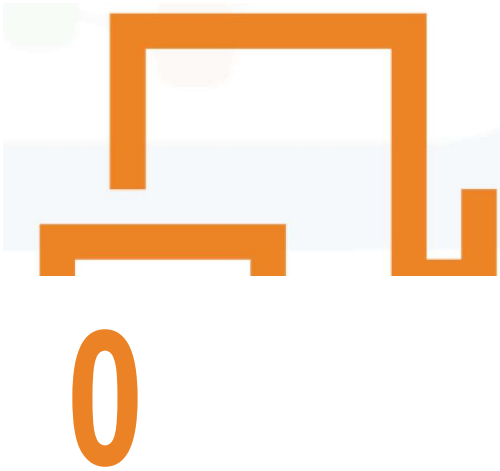
- JavaScript widely used and Typescript getting popular.
- Over 90% young male developers.
- Developers mostly located in developed countries.

Implications

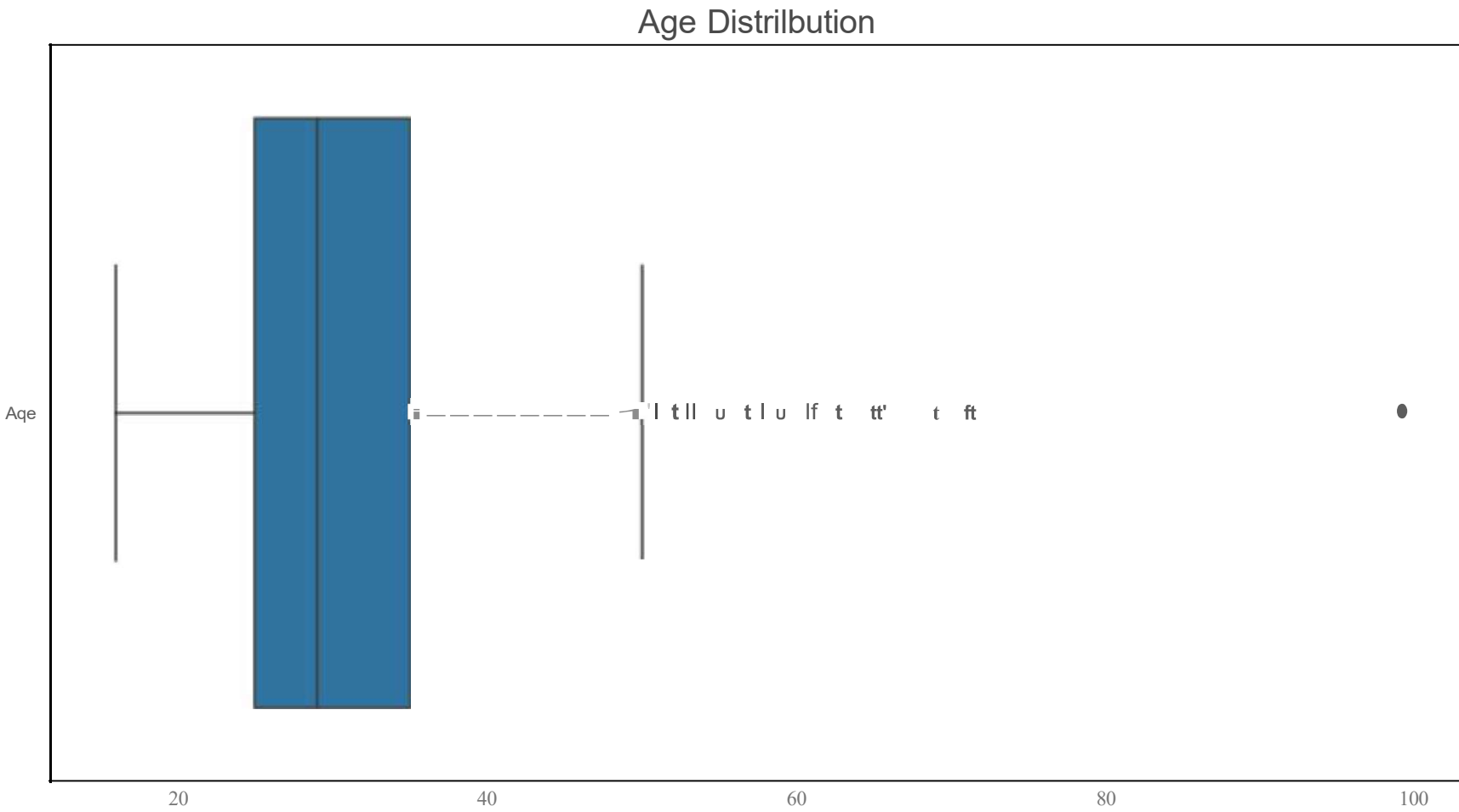
- JavaScript and TypeScripi frames gaining followers.
- Global polarization of de location and gender.
- Young developers withoL postgrad studies on its m

CONCLUSION

- Developers are people with very ma characteristics.
- A good idea of popularity trends of c tools, platforms and languages can t obtained.
- There is a job to be done to spread accessibility of this labor market to countries in development.



AGE DISTRIBUTION BOXPLOT



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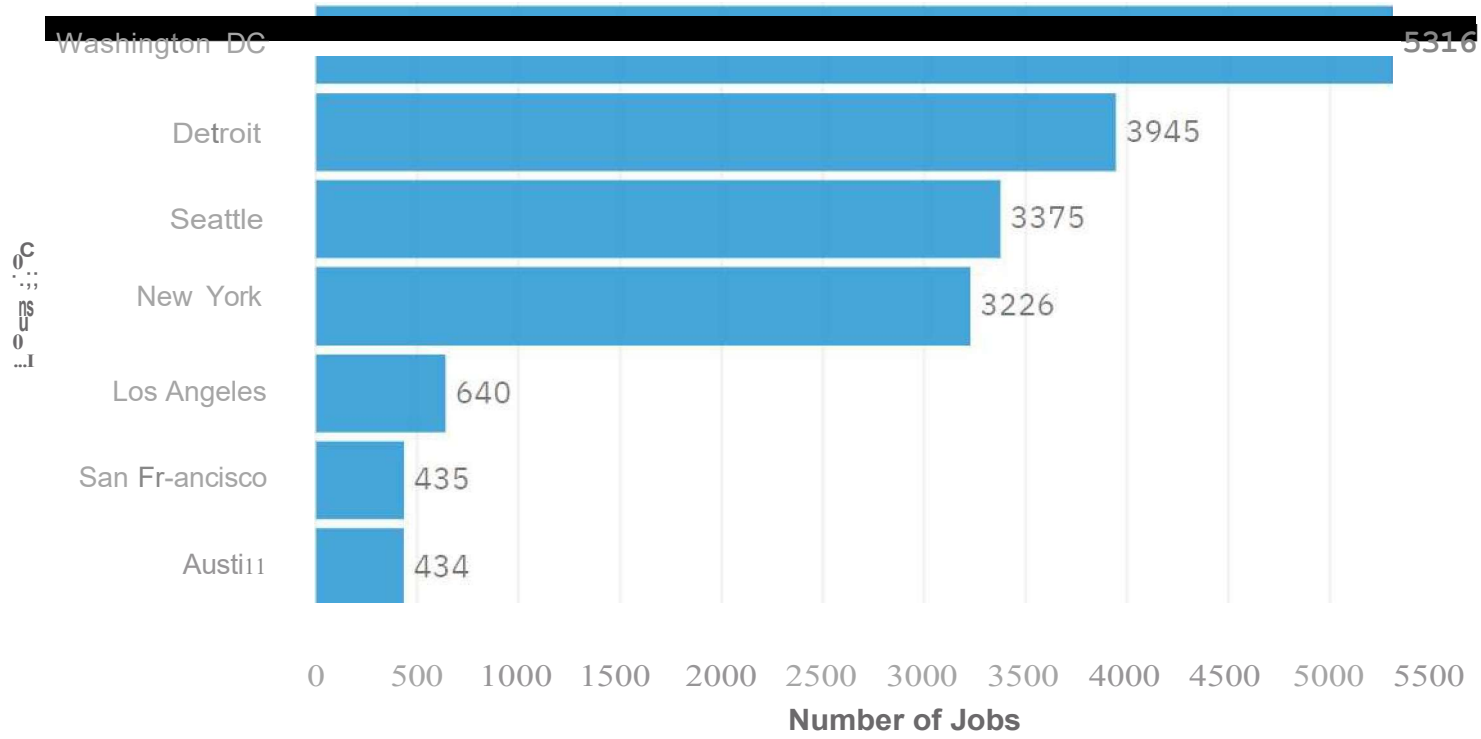
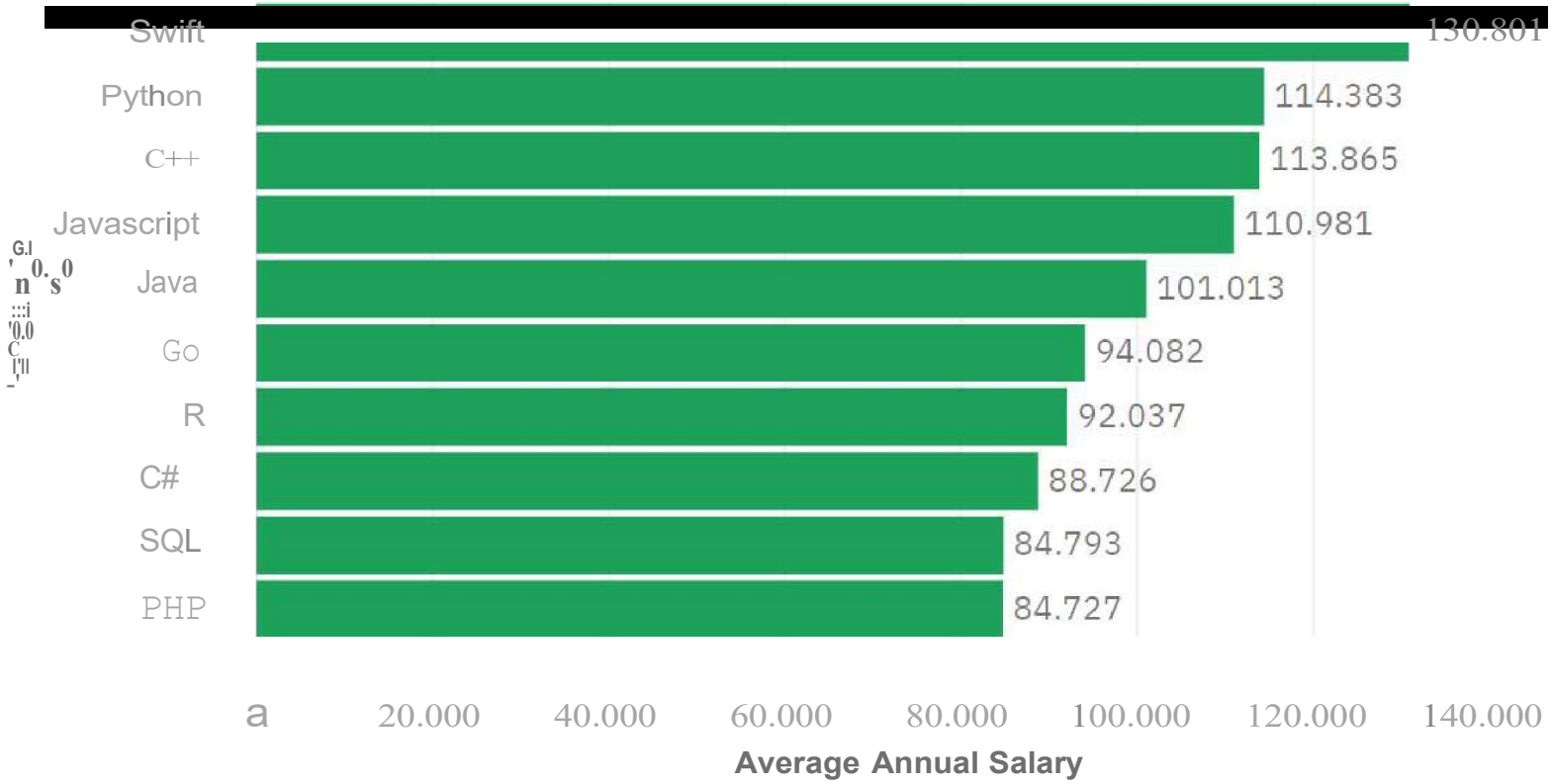
JOB POSTINGS



POPULAR LANGUAGES



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