STACK OVERFLOW DEVELOPER SURVEY 2019

Pavani Dusari

October 15/2023

https://www.linkedin.com/in/alvaroj-ortegab/

IBM Developer

SKILLS NETWORK

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 visualizations.
- 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.
- Nearly 90,000 developers.
- Trends to predict where the developers are going.
- Characterization of developers around the globe.

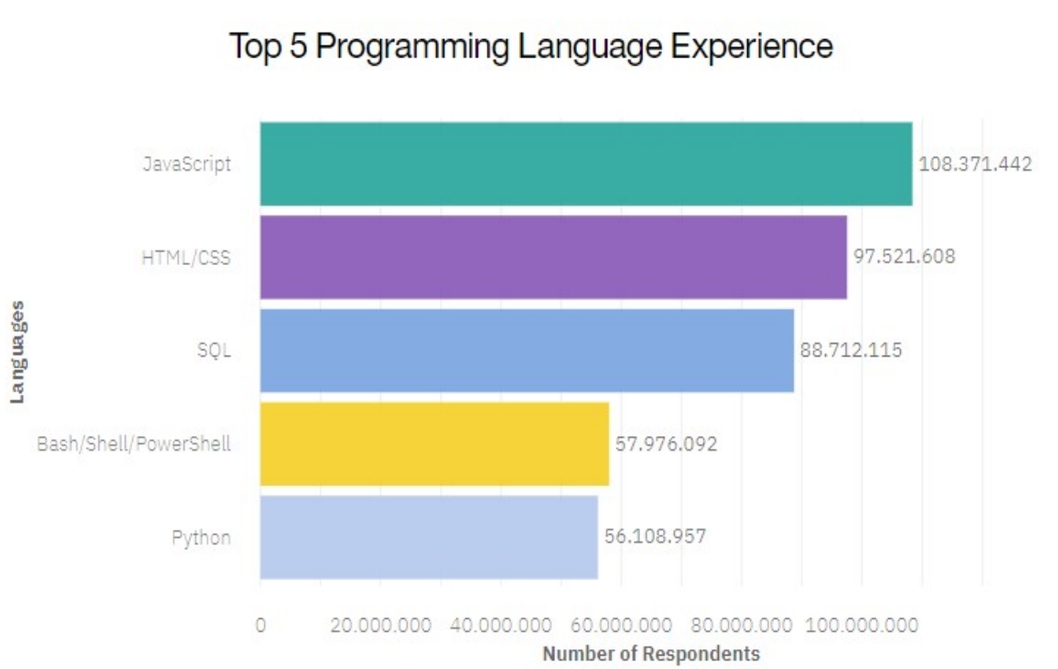
METHODOLOGY

- 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 composition and comparison of data.
- Dashboards

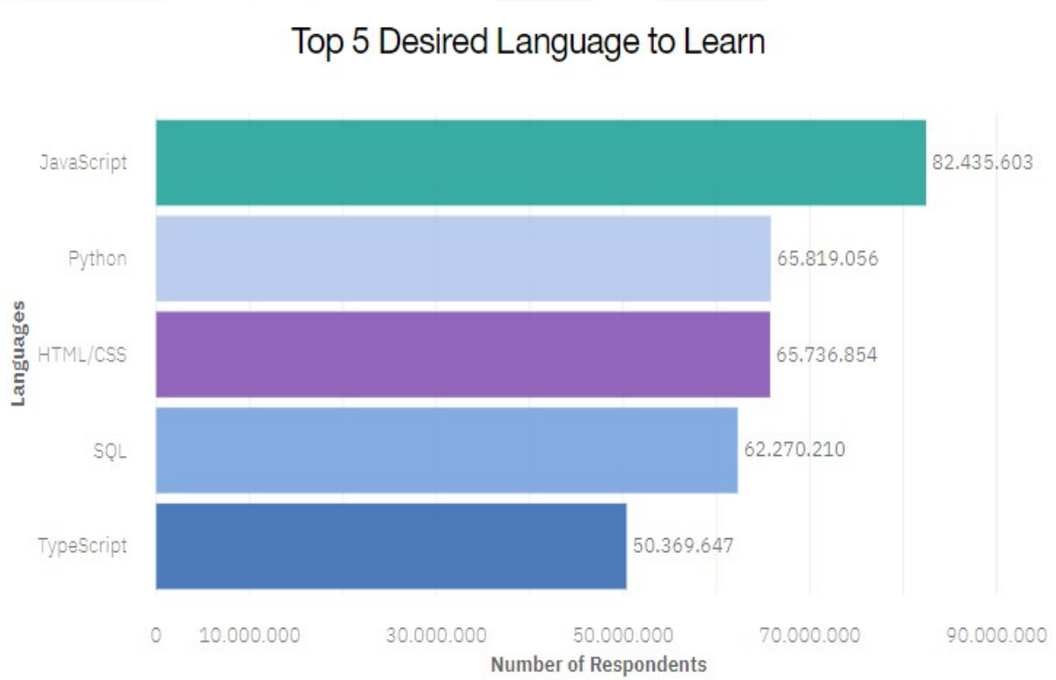
RESULTS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



IBM Developer

SKILLS NETWORK

PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

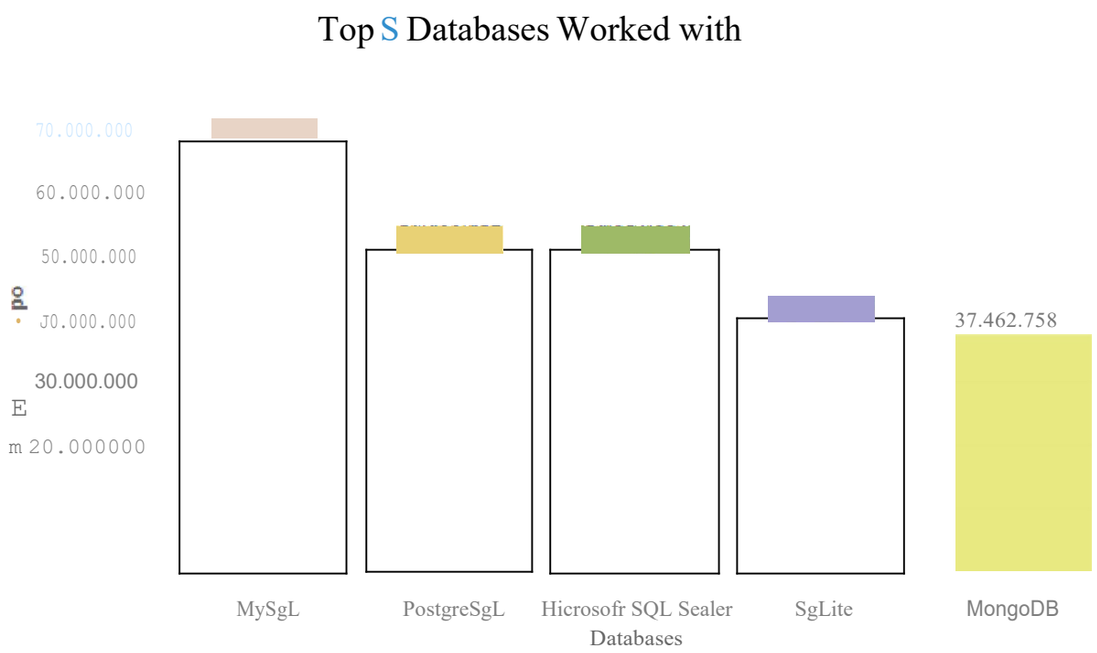
- JavaScript seems to keep as leading language.
- Python fastest-growing.
- Great interest in TypeScript

Implications

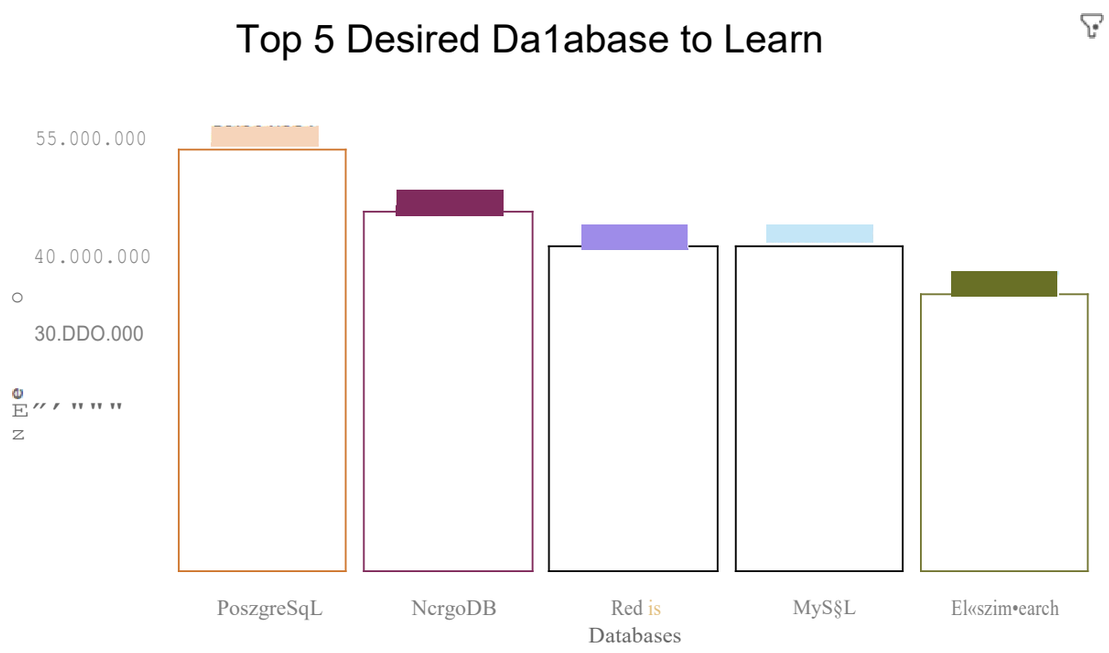
- Possible developers migration from JavaScript to TypeScript.

DATABASE TRENDS

Current Year



Next Year



IBM Devc1oper

SKILLS NITHORK

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 SQLite losing ground in the market.
- PostgreSQL and MongoDB establishment in the market.

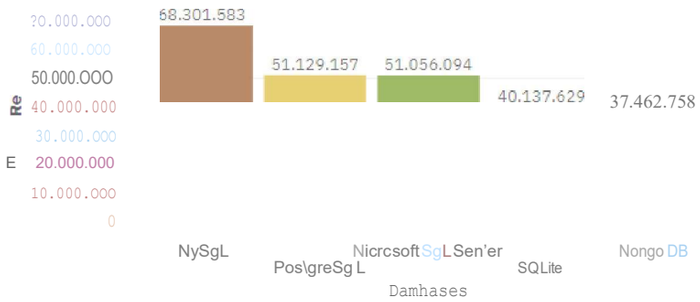
DASHBOARD

https://dataplatform.cloud.ibm.com/da shboards/380a93e5-f4a1-4e4d-9841-4966b65d676b/view/4c21e17d12b36af74bfcc0e407cf7a0f7d35250fbabb8456d6d77b490a327397f33b1590c87c1d5b89130561a5bf110acc

CURRENT TECHNOLOGY USAGE

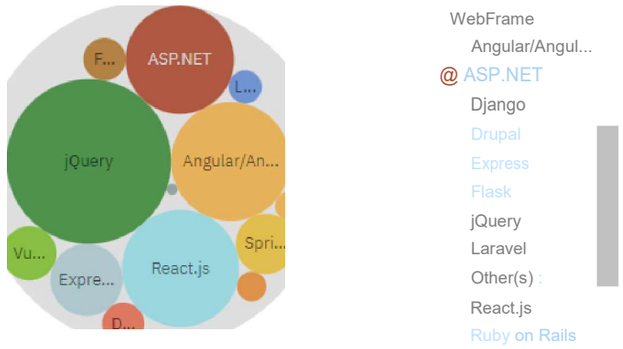
Top S Programming Language Experience

Top S Databases Worked with



Platforms Interacted

Top 10 WebFrames Used

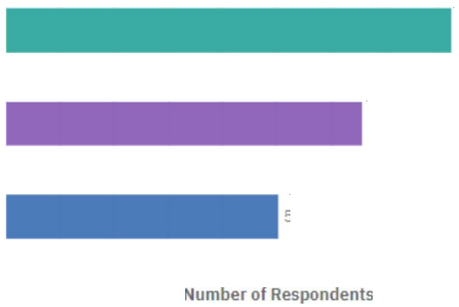


IBM Developer

SKILLS NITHORK

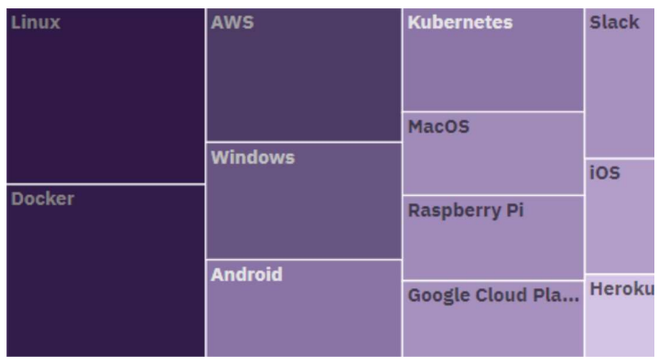
FUTURE TECHNOLOGY TREND

Top 5 Desired Language to Learn



Top 5 Desired Database to Learn

Platform Next Year



Ardu...

Word...

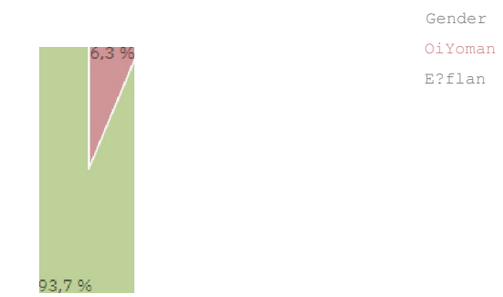
Top 10 WebFrame Next Year

IBM Developer

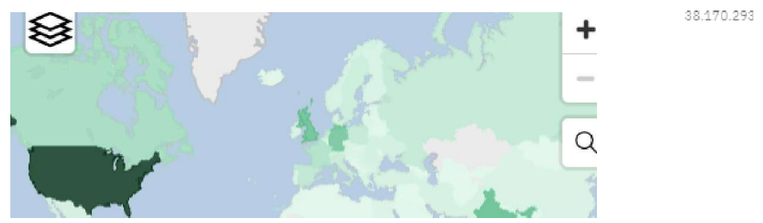
SKILLS NETHORK @:@

DEMOGRAPHICS

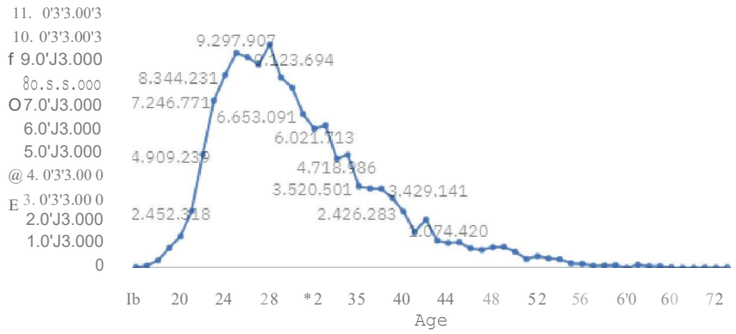
Respondent by Gender



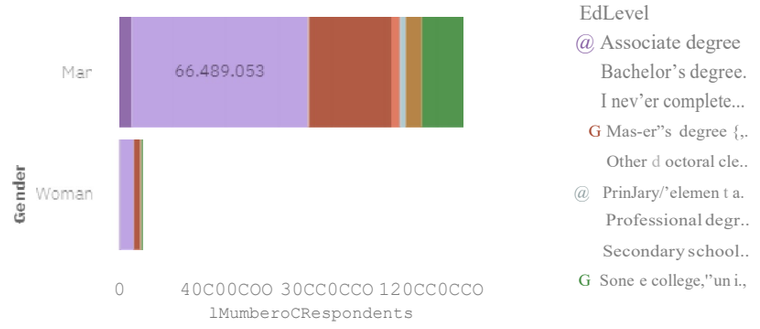
Respondent Locations



Respondent by Age



Formal Education Level / Gender



IBM Developer

SKILLS NITHORK

DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

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

Implications

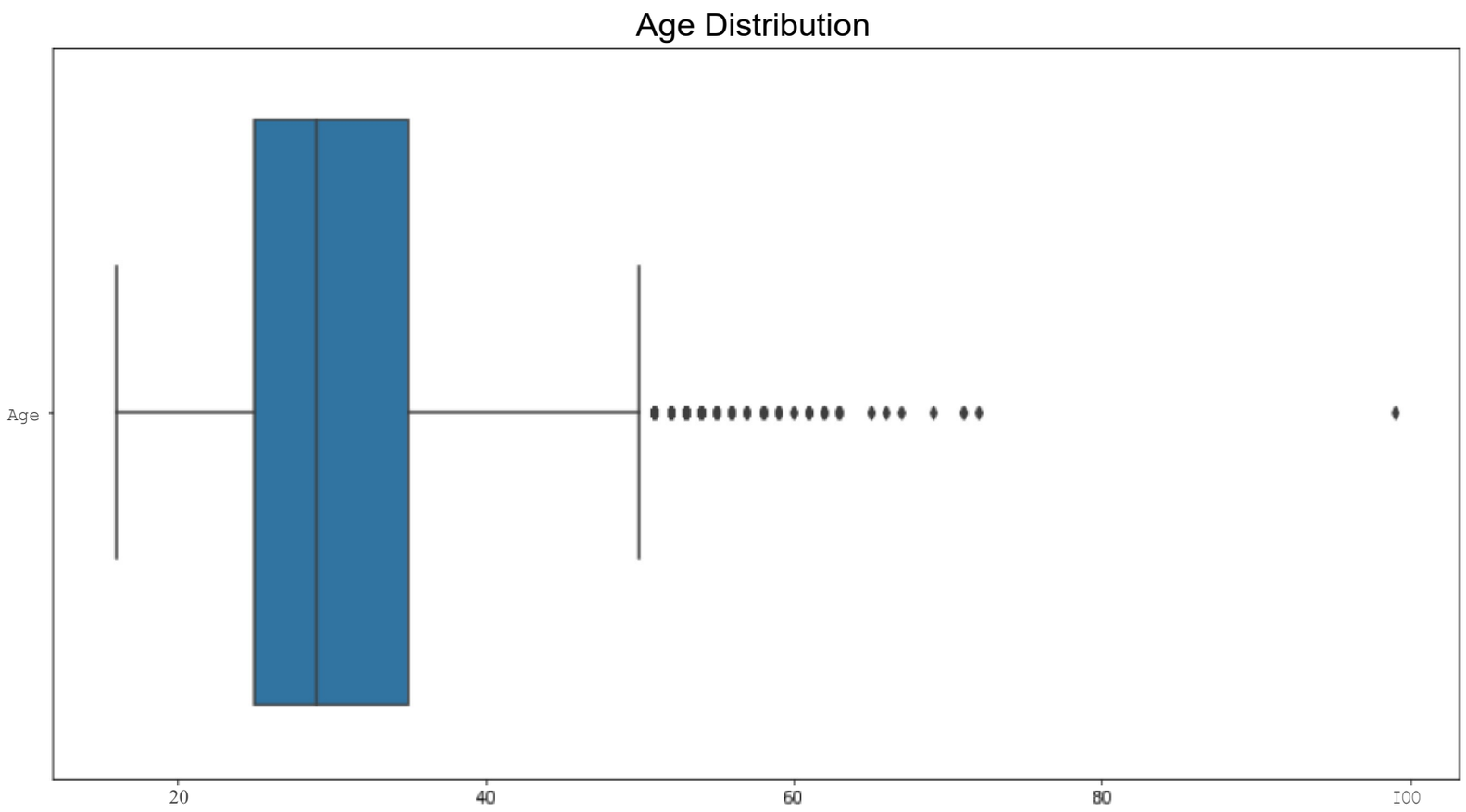
- JavaScript and TypeScript web frames gaining followers.
- Global polarization of developers location and gender.
- Young developers without postgrad studies on its majority.

CONCLUSION

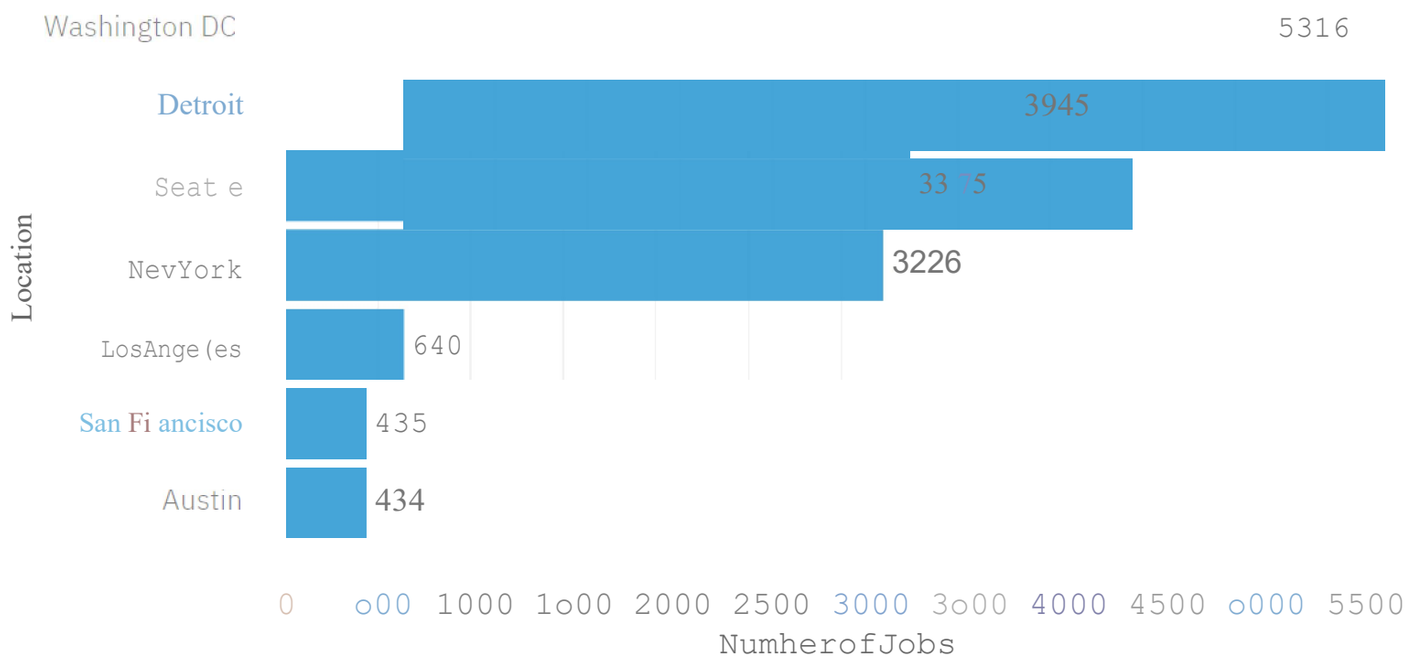
- Developers are people with very marked characteristics.
- A good idea of popularity trends of different tools, platforms and languages can be obtained.
- There is a job to be done to spread accessibility of this labor market to countries in development.

APPENDIX

AGE DISTRIBUTION BOXPLOT



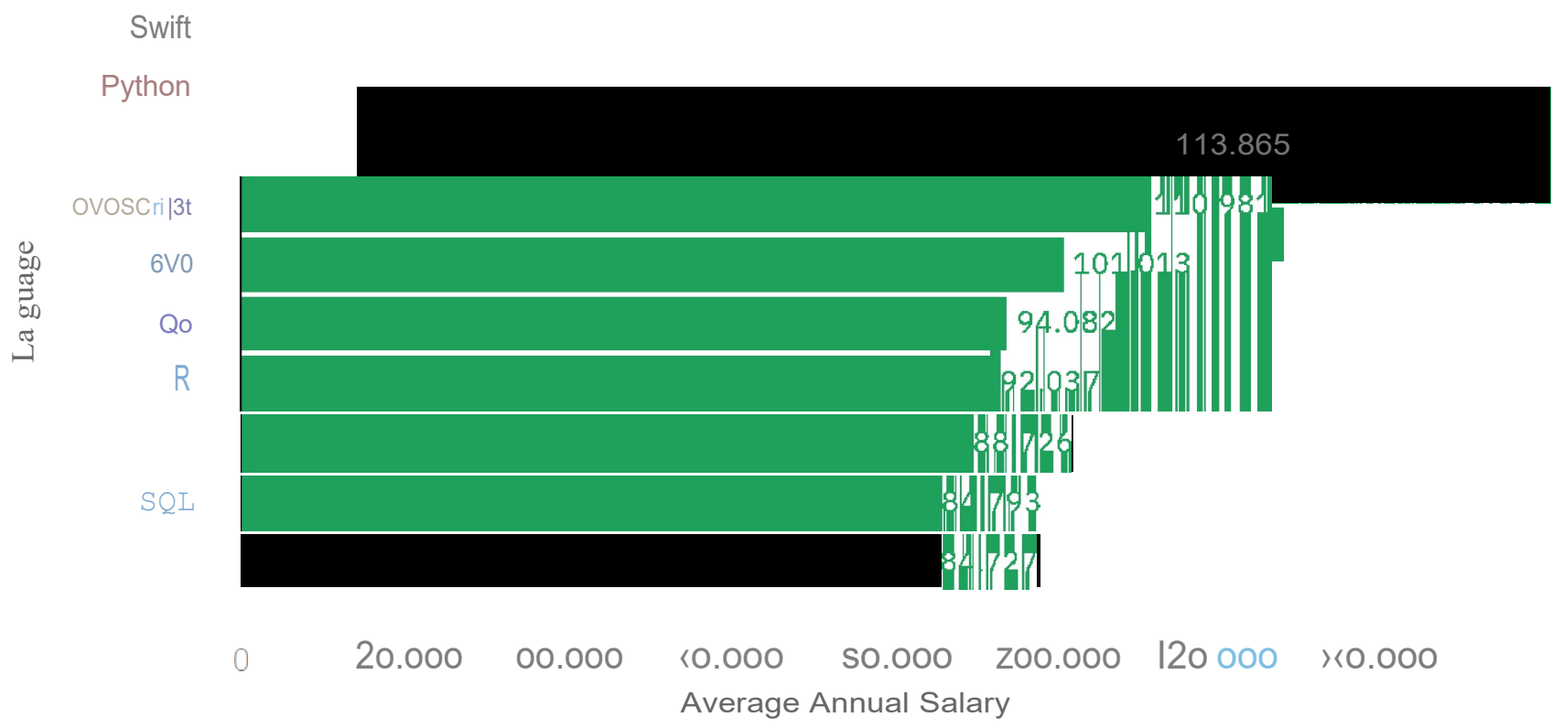
JOB POSTINGS



IBM Devc1oper

SKILLS NITHORK

POPULAR LANGUAGES



IBM Devc1oper

SKILLS NITHORK