

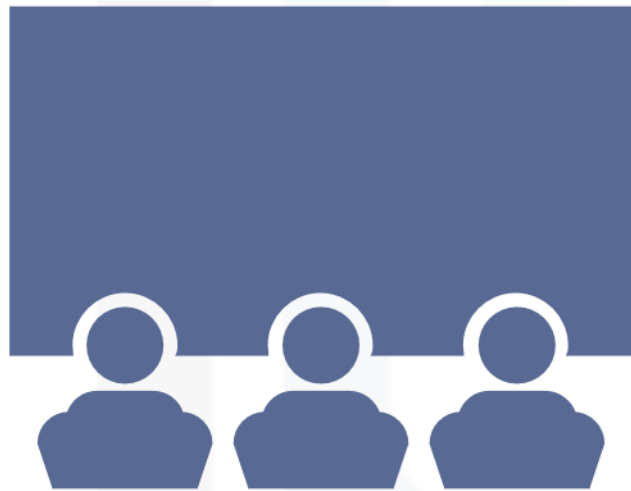


# STACK OVERFLOW DEVELOPER SURVEY

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October 6, 2023

# OUTLINE

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

# EXECUTIVE SUMMARY

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- Goal : Data contextualization and analysis
- Methodology description
  - Data Gathering
  - Data Analysis
  - Data Visualizations
- Results supported with graphs & trends
- Discussion of overall findings and implications
- Final conclusions of the carried out research.

# INTRODUCTION

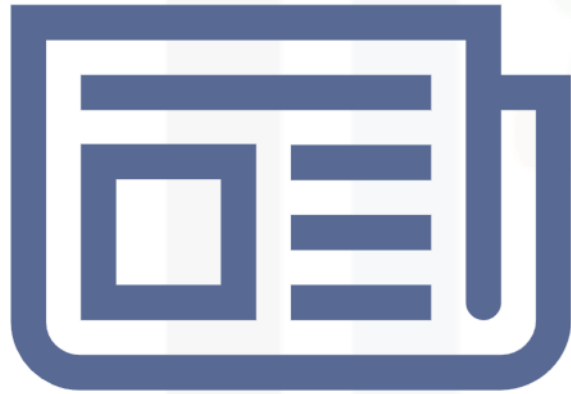
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- Stack Overflow's annual Developer Survey is the largest and most comprehensive survey of people who code around the world.
- Results don't represent everyone in the developer community evenly.
- There are nearly 90,000 developers.
- Trends to predict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

# METHODOLOGY

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- Collect survey data & explore its contents :-
  - Web Scraping
  - APIs.
  - Request library
- Data Wrangling
- Exploratory Data Analysis
  - Analyzing data Distribution
  - Handling Outliers
  - Correlations
- Data Visualization
  - Highlight distribution of data, relationships, composition and comparison of data.
- Dashboards

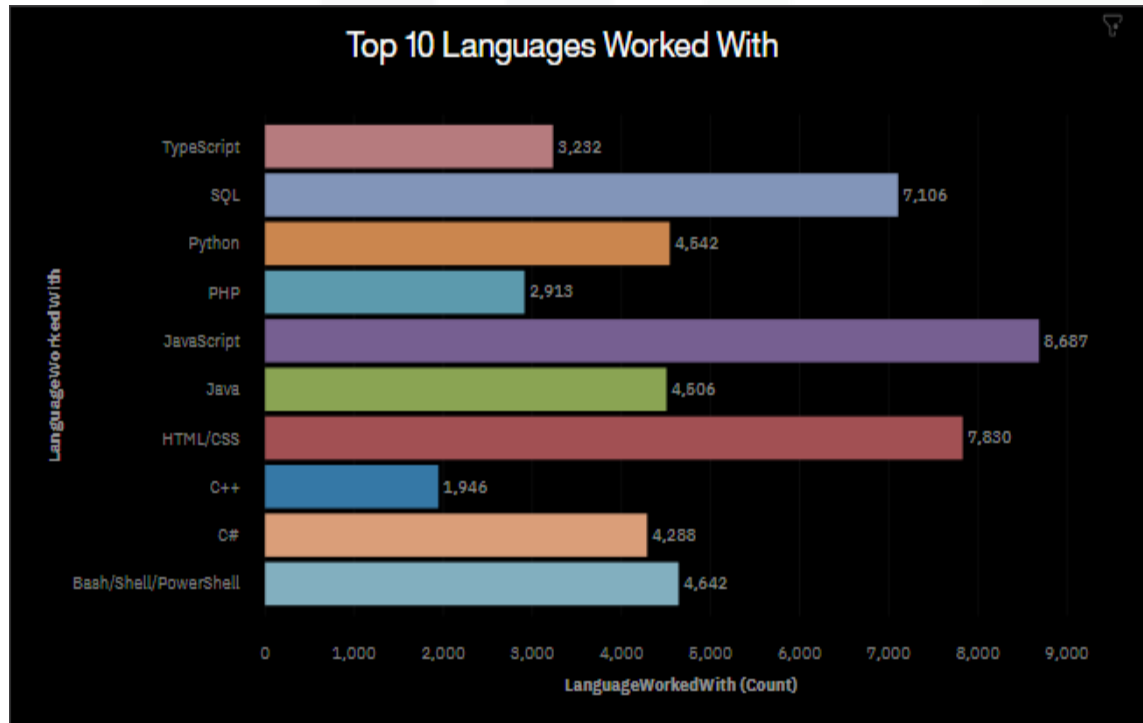
# RESULTS

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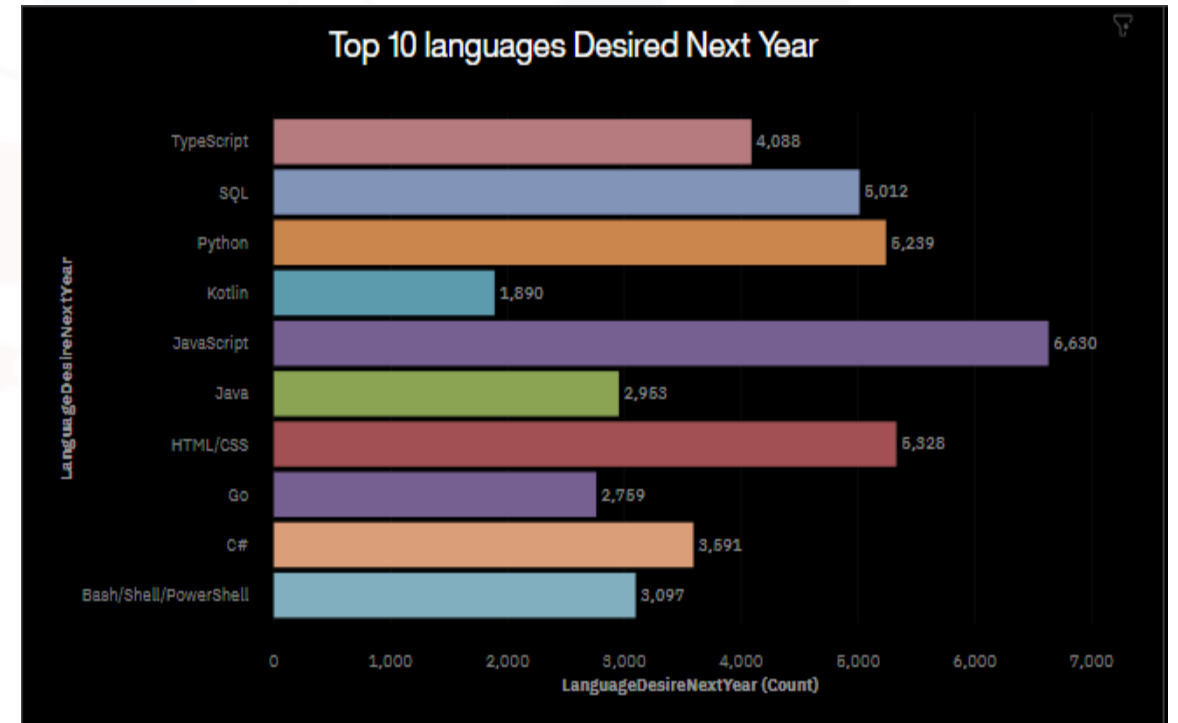


# PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

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

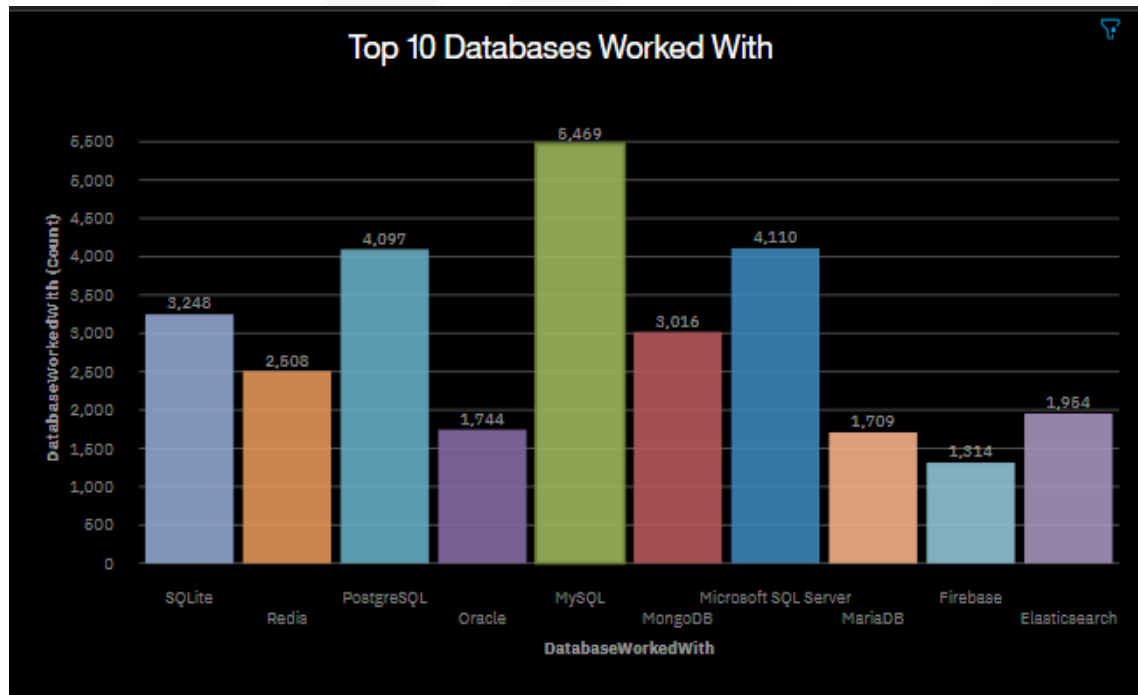
## Implications

- Possible developers migration from JavaScript to TypeScript.

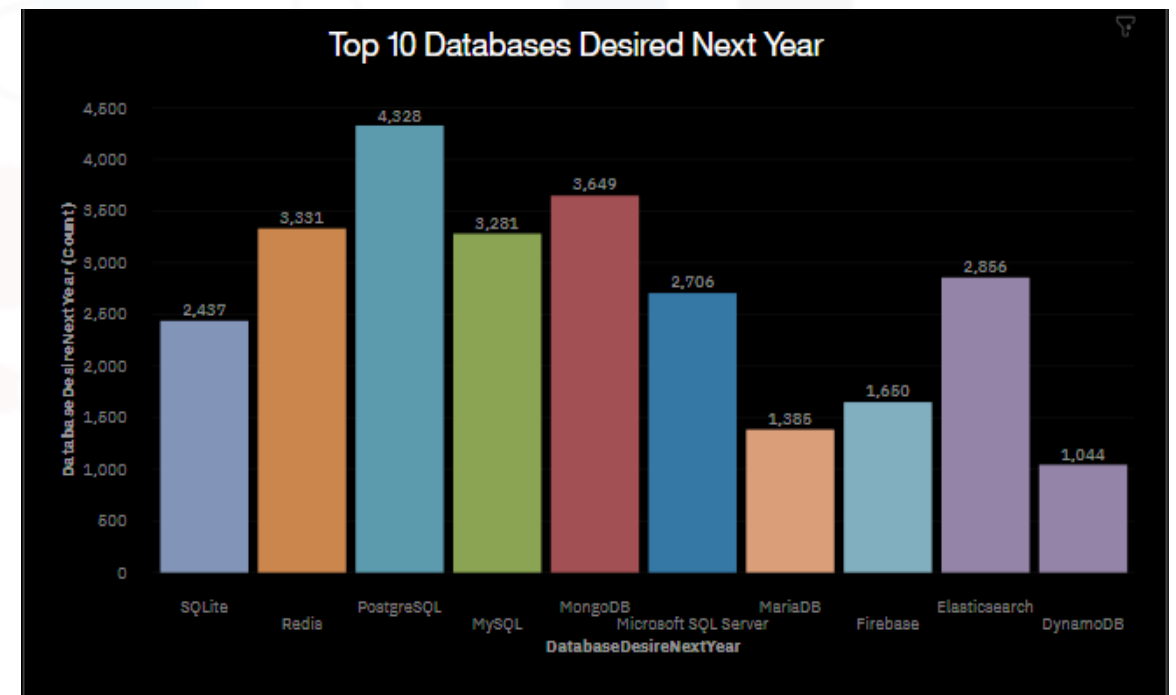


# DATABASE TRENDS

## Current Year



## Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## 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.

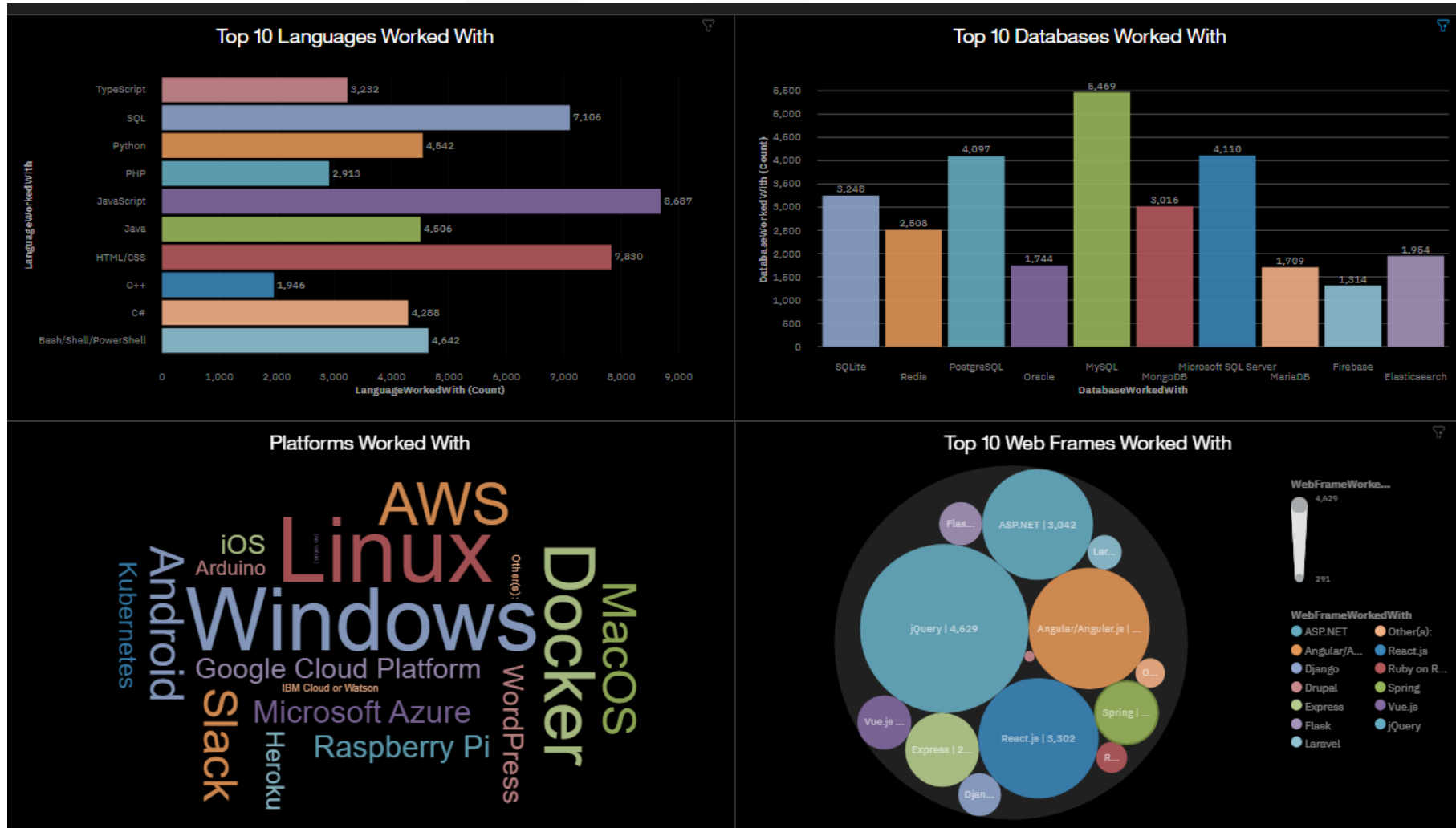
# DASHBOARD

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[Dashboard Link](#)

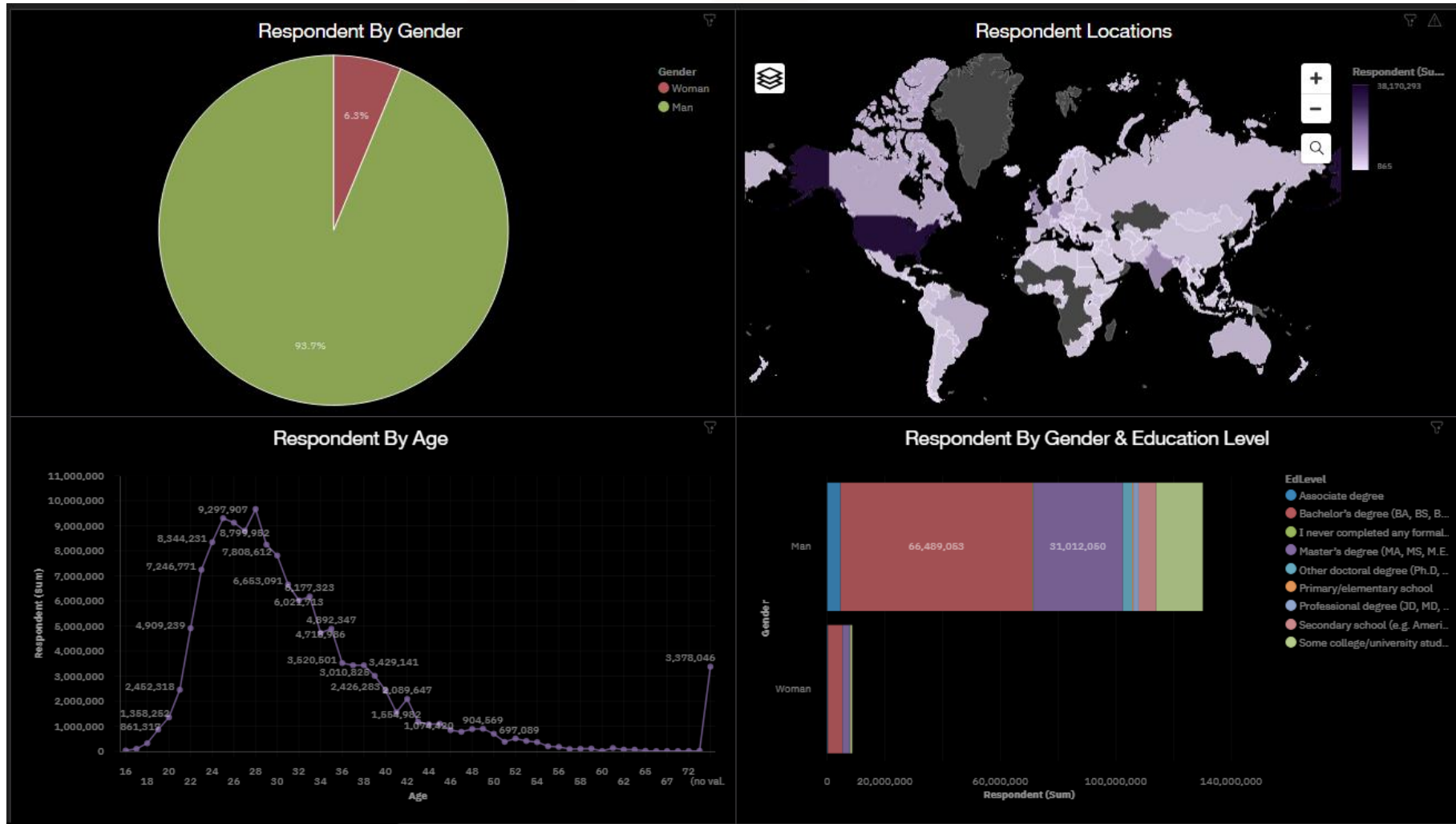
# CURRENT TECHNOLOGY USAGE



# FUTURE TECHNOLOGY TREND



# DEMOGRAPHICS



# DISCUSSION

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# OVERALL FINDINGS & IMPLICATIONS

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## 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

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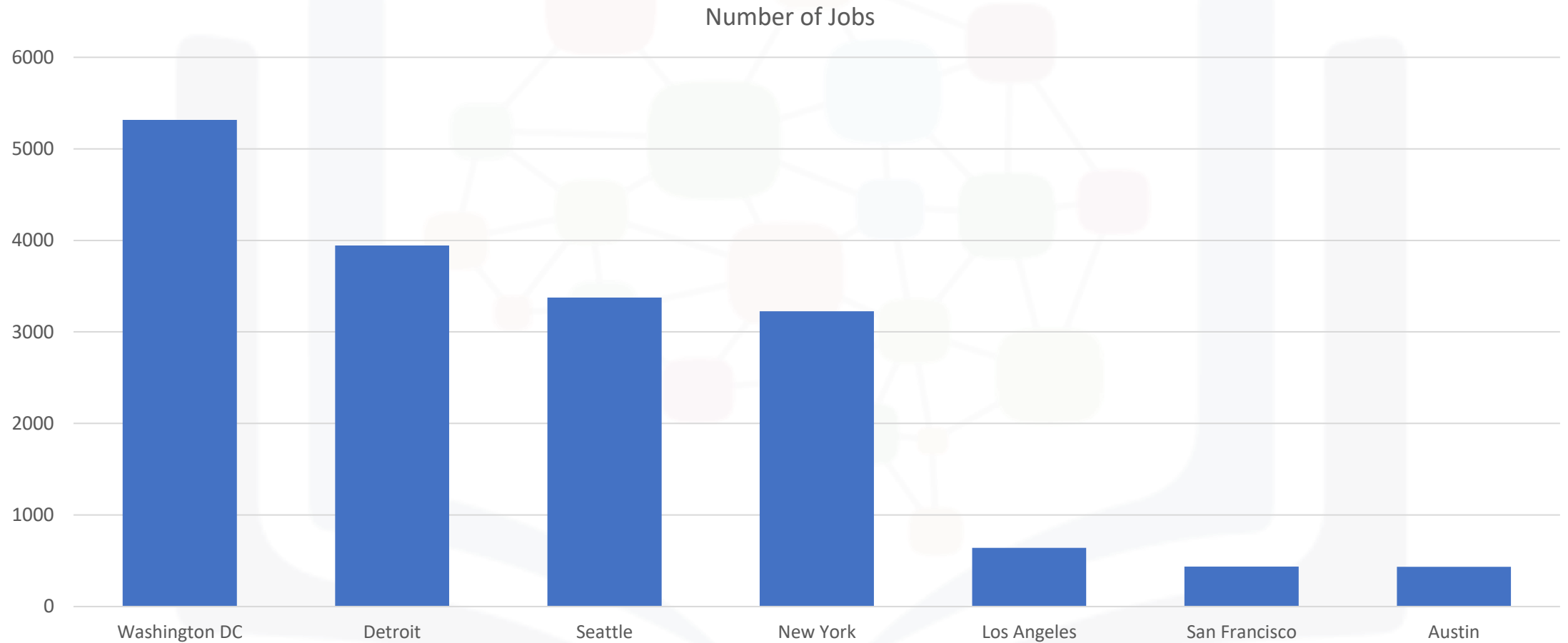
- Developers are people with very marked characteristics.
- A good idea of popularity trends of different tools, platforms and languages can be obtained.
- There is a job to be done to spread accessibility of this labor market to countries in development.

# APPENDIX

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# JOB POSTINGS



# POPULAR LANGUAGES

