



SURVEY ON STACK OVERFLOW DEVELOPER DATA

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OUTLINE



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



- Data contextualization and analysis.
- Methodology.
 - Data gathering
 - Data analysis
 - Data visualization
- Visualization of the results with dashboard.
- Results discussion and findings
- Conclusion

INTRODUCTION



- Stack Overflow Developer Survey is an annual survey conducted by Stack Overflow, a popular online community for developers.
- This project gathers insights into various aspects of the software development industry, including programming languages, frameworks, tools, technologies, job satisfaction, and demographics.
- A dashboard showcasing various patterns and trends such as:
 - Programming Language Popularity
 - Future Technology Trends
 - Developer Demographics by age, gender and education level of the respondents.

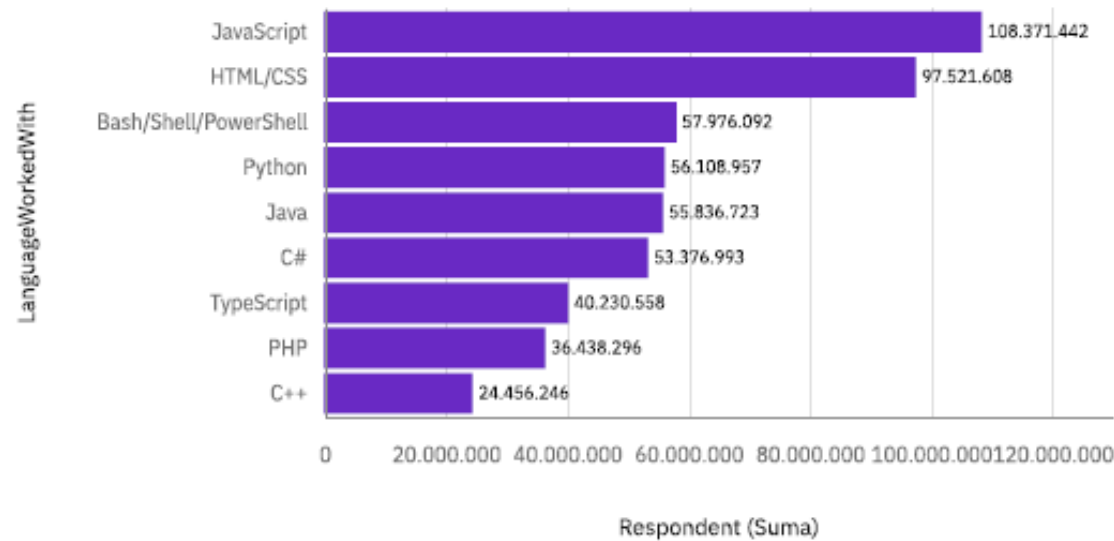
METHODOLOGY



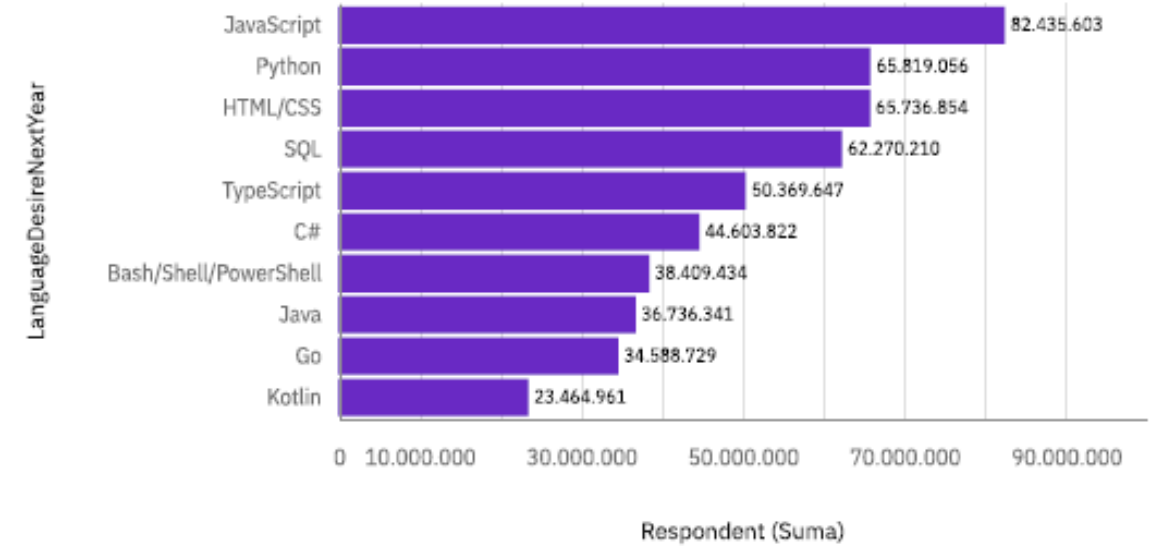
- Data collection:
 - APIs
 - Web Scrapping
- Data wrangling
 - Finding and removing duplicates and missing values.
 - Normalizing Data
- EDA
 - Data distribution and handling outliers
 - Finding correlations.
- Data Visualization
 - Building dashboards of the actual data and a prediction.

PROGRAMMING LANGUAGE TRENDS

Top 10 Programming Languages



Top 10 Desired Language



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript is the top used and desired language.
- C++ will not be on the top 10.
- Number of respondents has decreased

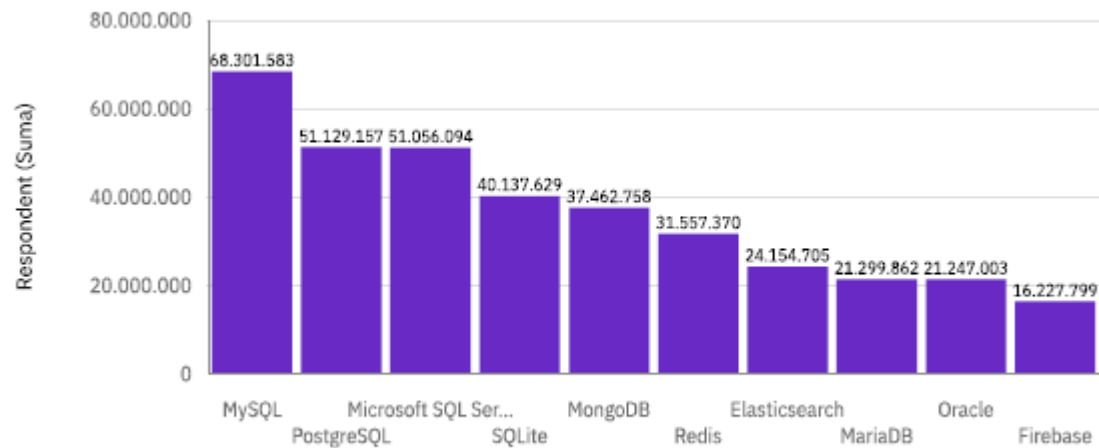
Implications

- High demand for JavaScript developers
- Increase maintenance challenge for C++ based platforms
- Reduced career opportunities, dependency on technology.

DATABASE TRENDS

Current Year

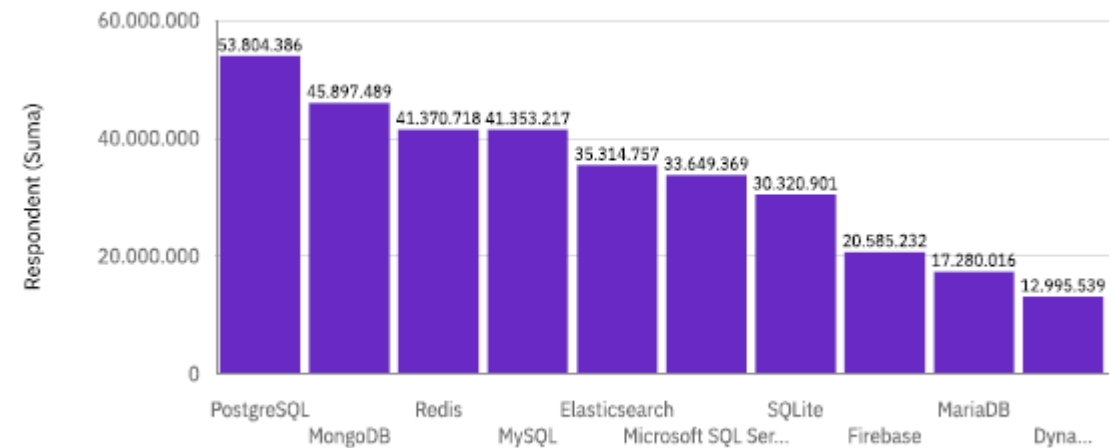
Top 10 Databases



DatabaseWorkedWith

Next Year

Top 10 Desired Databases



DatabaseDesireNextYear

DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL is the top used and desired.
- PostgreSQL demand will increase.
- Oracle will not be on the top 10.

Implications

- Demand for MySQL will increase.
- More job opportunities for people skilled with PostgreSQL.
- Increase maintenance challenge for Oracle based databases.

DASHBOARD

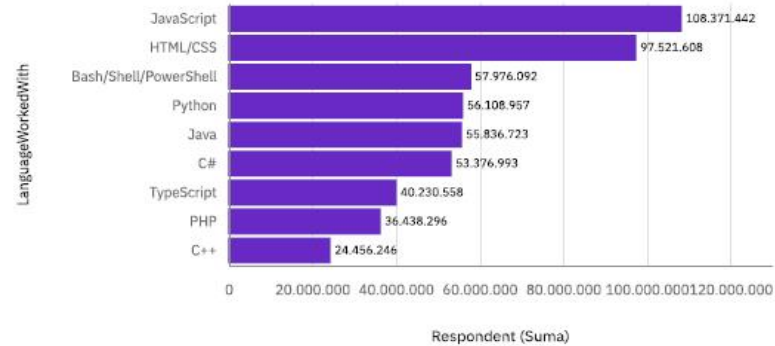


Dashboard

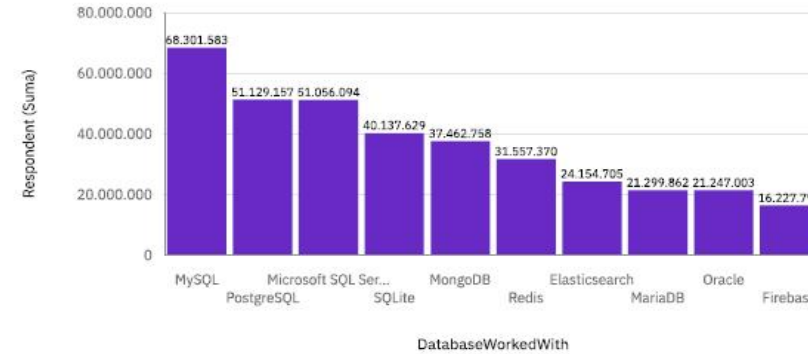
CURRENT TECHNOLOGY USAGE

Current Technology Usage

Top 10 Programming Languages



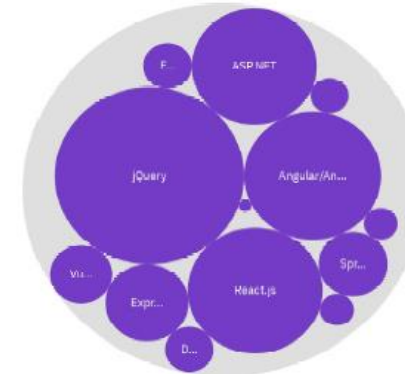
Top 10 Databases



PlatformWorkedWith y Respondent



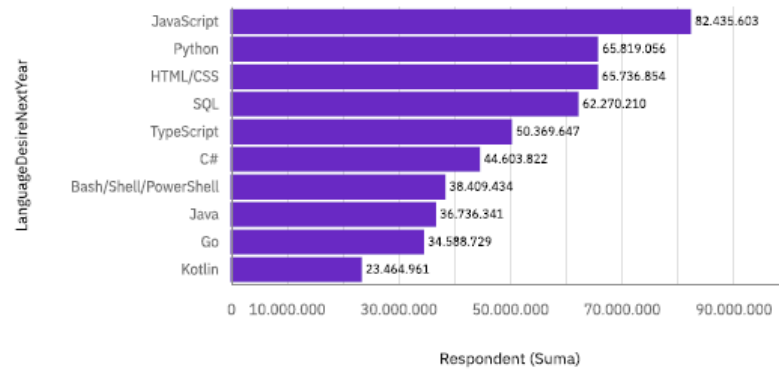
Most WebFrames Used



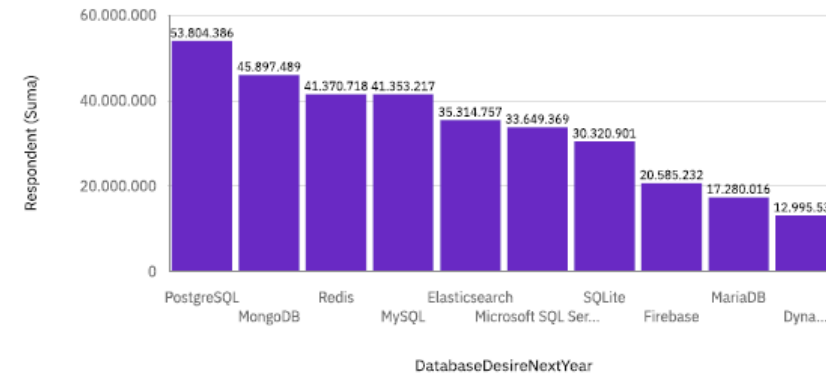
FUTURE TECHNOLOGY TRENDS

Future Technology Usage

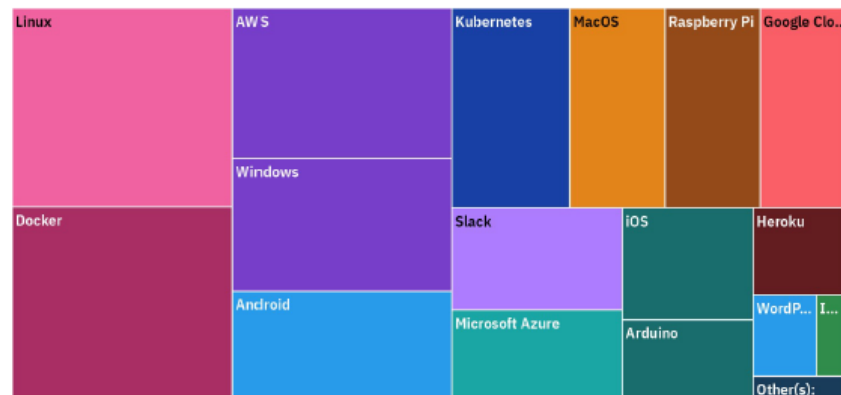
Top 10 Desired Language



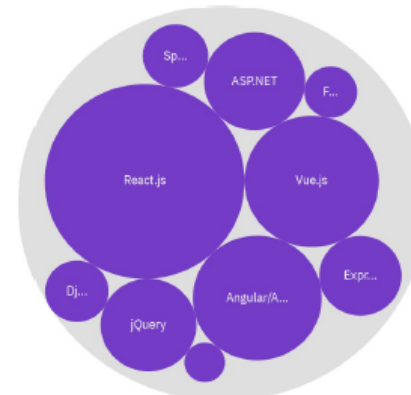
Top 10 Desired Databases



Desired Platforms



Top 10 Desired WebFrames

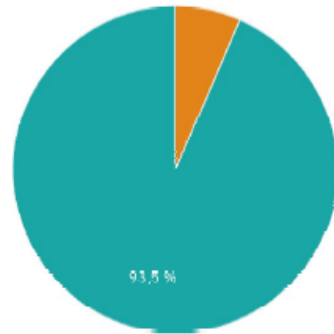


DEMOGRAPHICS

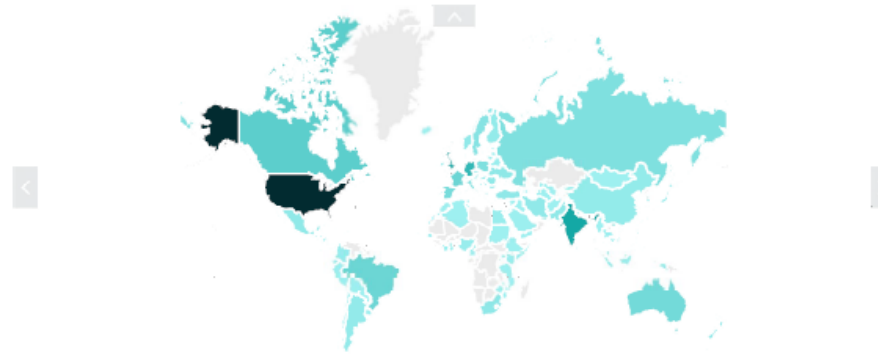
Demographics

Respondent Classified by Gender

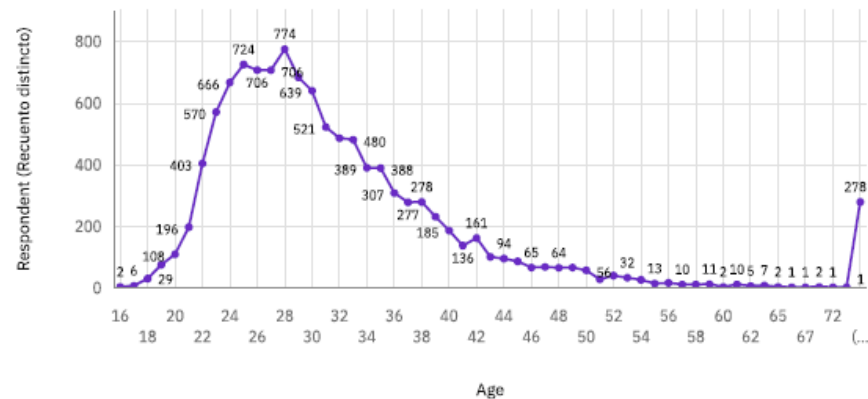
Gender
● Woman ● Man



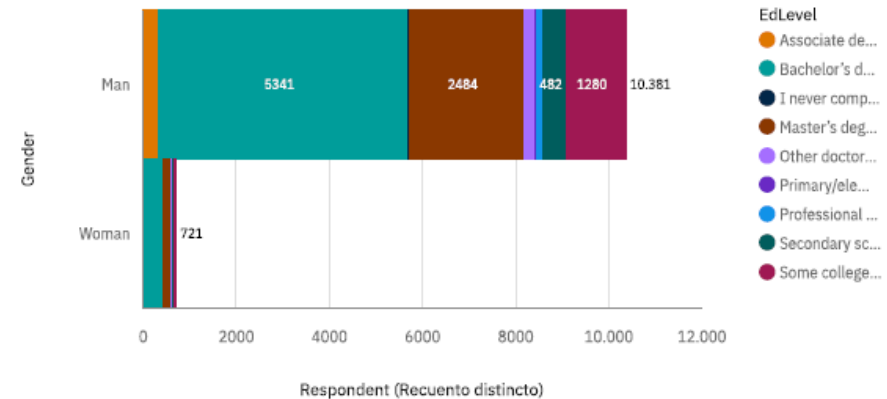
Respondent Location



Respondent por Age



Respondent por Gender



DISCUSSION



- There isn't a massive shift in the current technology trend as compared to the future.
- The amount of respondents wanting to learn various programming languages has decreased.
- There are more male respondents than female respondents.
- Maximum respondents belong to the age group of 20-30 years of age.

OVERALL FINDINGS & IMPLICATIONS

Findings

- There are more male respondents than female respondents.
- Youth are more comfortable with programming languages
- Not a massive shift in the current vs future technology trends.

Implications

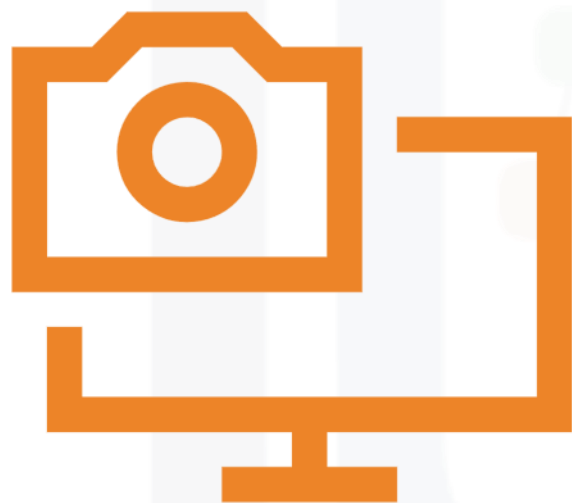
- Women may face challenges in achieving the same level of technology independence and proficiency as men.
- Early adoption of technology and access to educational/career opportunities.

CONCLUSION

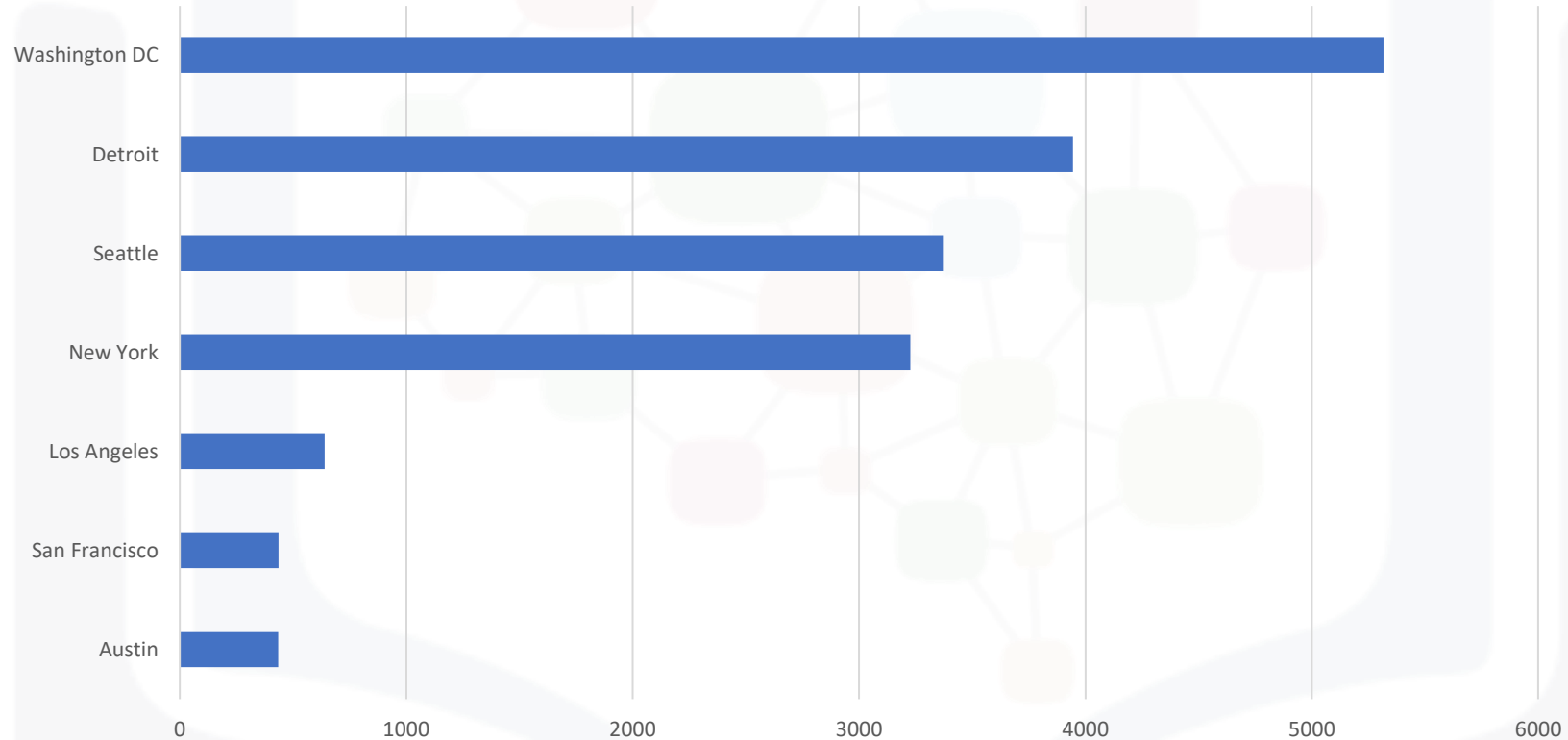


- The Stack Overflow Developer Survey offers valuable insights into current trends, preferences, and challenges within the global developer community.
- Key findings from the survey indicate the continued dominance of JavaScript as the most popular programming language.
- The survey underscores the increasing significance of remote work, diversity, and inclusion initiatives within the tech industry..

APPENDIX



JOB POSTINGS



POPULAR LANGUAGES RANKED BY ANNUAL SALARY (IN THOUSANDS)

