The 2019 Stack Overflow Developer Survey Results

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EXECUTIVE SUMMARY

- **Demographics:** The survey included responses from over 90,000 developers, with diverse representation across age, gender, and nationality.
- **Technology Trends:**
  I. JavaScript remains the most commonly used programming language, while Python continues to rise in popularity. The use of container technologies like Docker has seen significant growth.
  II. PostgreSQL and MongoDB continue to rise in as popular Databases to be worked and React.js has significantly growth as a Web frame work.

INTRODUCTION

- Stack Overflow's annual Developer Survey is the largest and most comprehensive survey of people who code around the world.
- This year marks the ninth year we've published our annual Developer Survey results, and nearly 90,000 developers took the 20-minute survey earlier this year.
- We acknowledge that our results don't represent everyone in the developer community evenly.
- The anonymized results of the survey are available for download under the Open Database License (ODbL).

METHODOLOGY

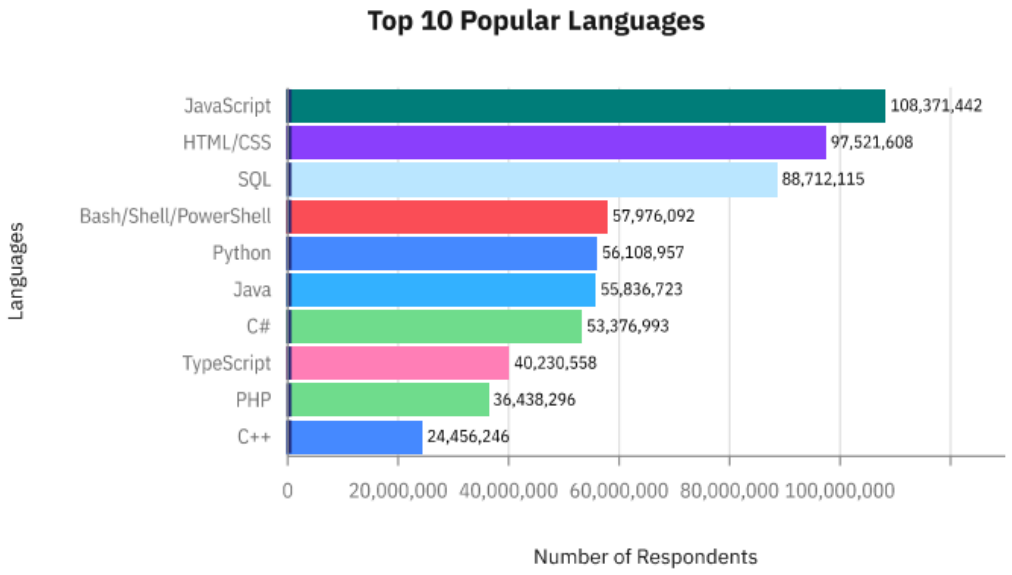
- **Data Collection:** The survey data was collected by Stack Overflow through an online questionnaire distributed to developers worldwide.
- **Data Processing:** Upon obtaining the anonymized dataset, we performed data cleaning to remove incomplete responses and outliers.
- **Analysis Techniques:** We utilized descriptive statistics to summarize the demographic information and developers' preferences.
- **Limitations:** We acknowledge that self-reported data may introduce response bias, and the voluntary nature of the survey could result in non-response bias.

RESULTS

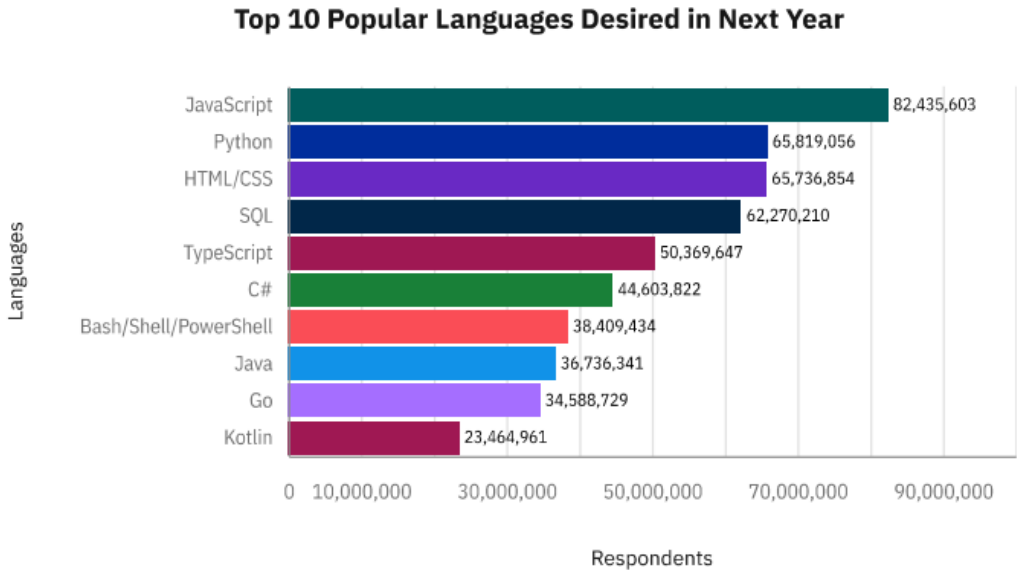
- PROGRAMMING LANGUAGES TRENDS
- DATABASE TRENDS

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

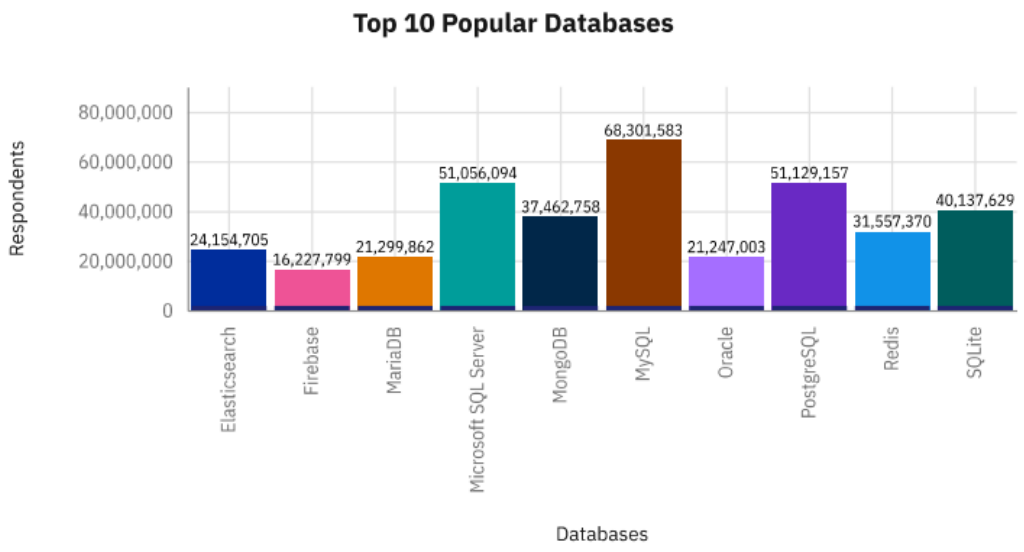
- JavaScript seems to keep as leading programming language.
- Python continues to rise in popularity.
- Interest in TypeScript has significant growth.

Implications

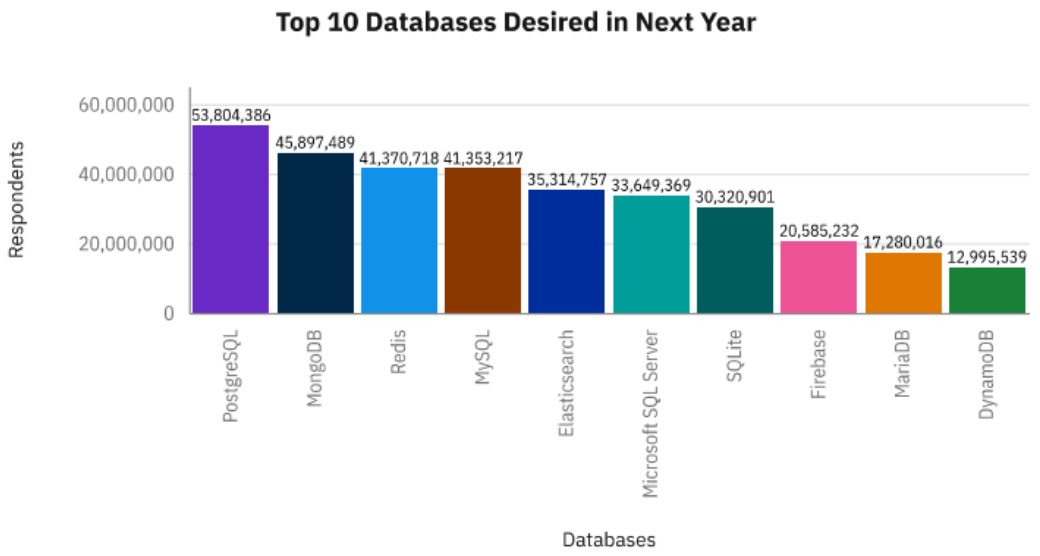
- Possible developers migration from JavaScript to TypeScript.

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL was most used database but decrease in popularity.
- Lack of interest in Microsoft SQL Server and SQLite.
- Increasing interest in PostgreSQL and MongoDB.

Implications

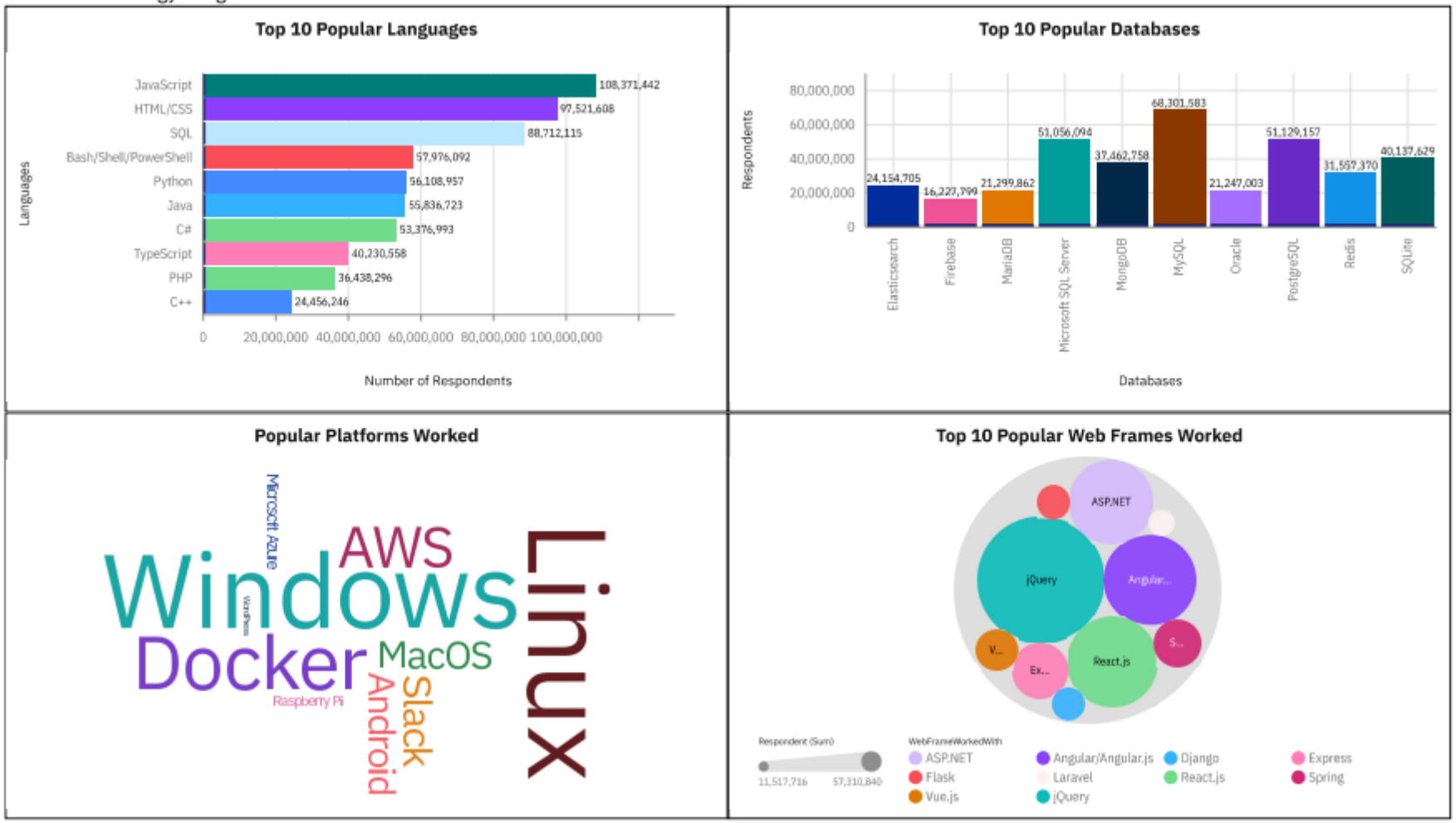
- Developers moving from other Databases technologies to PostgreSQL and MongoDB.

DASHBOARD

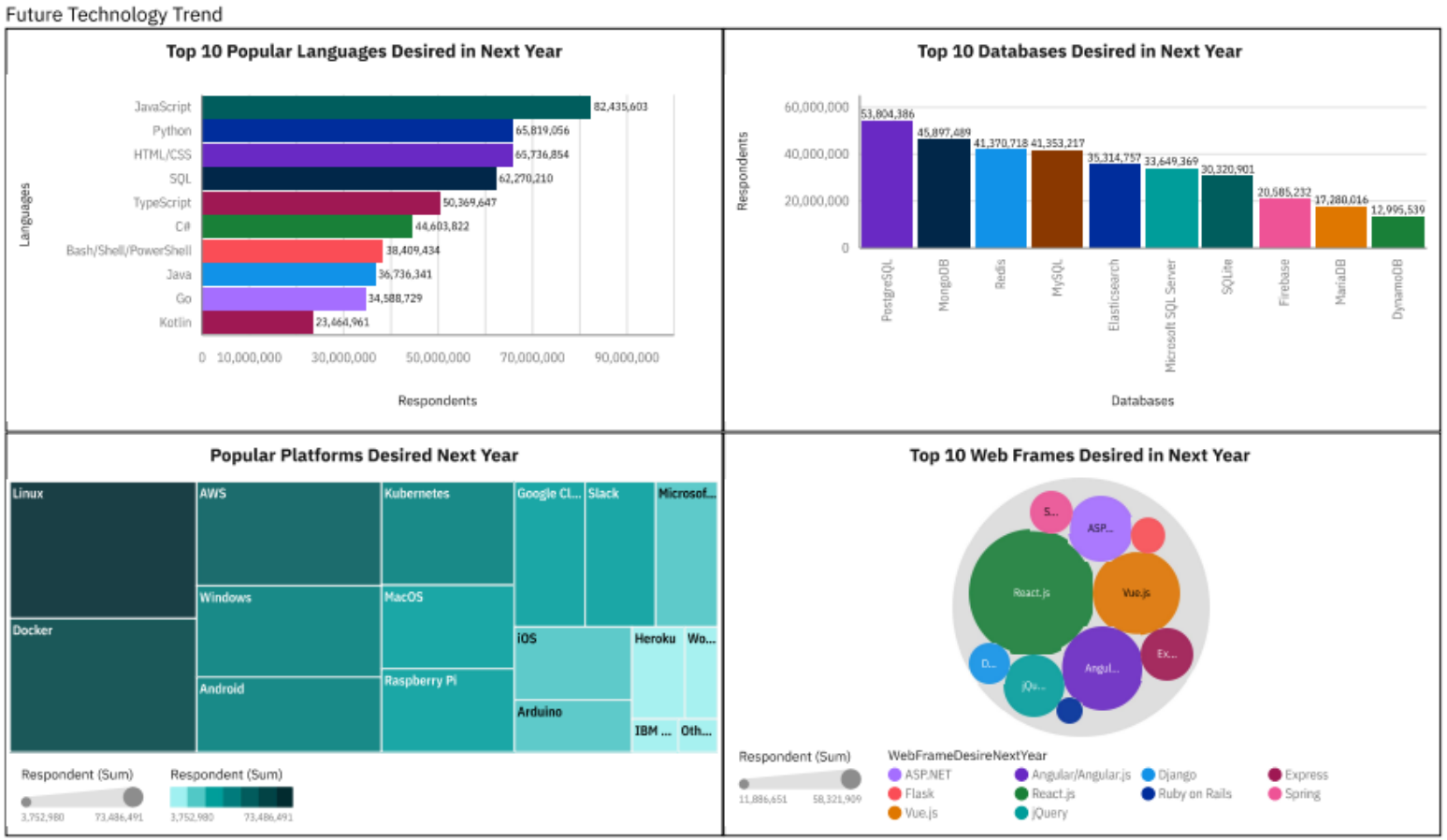
https://github.com/imp993/IBM-Data-Analyst-Capstone-Project/blob/ba803eff07c286877ab8e50993e33fdc4cacb100/Peer-Graded%20Assignment_Building%20A%20Dashboard.pdf

DASHBOARD TAB 1

Current Technology Usage

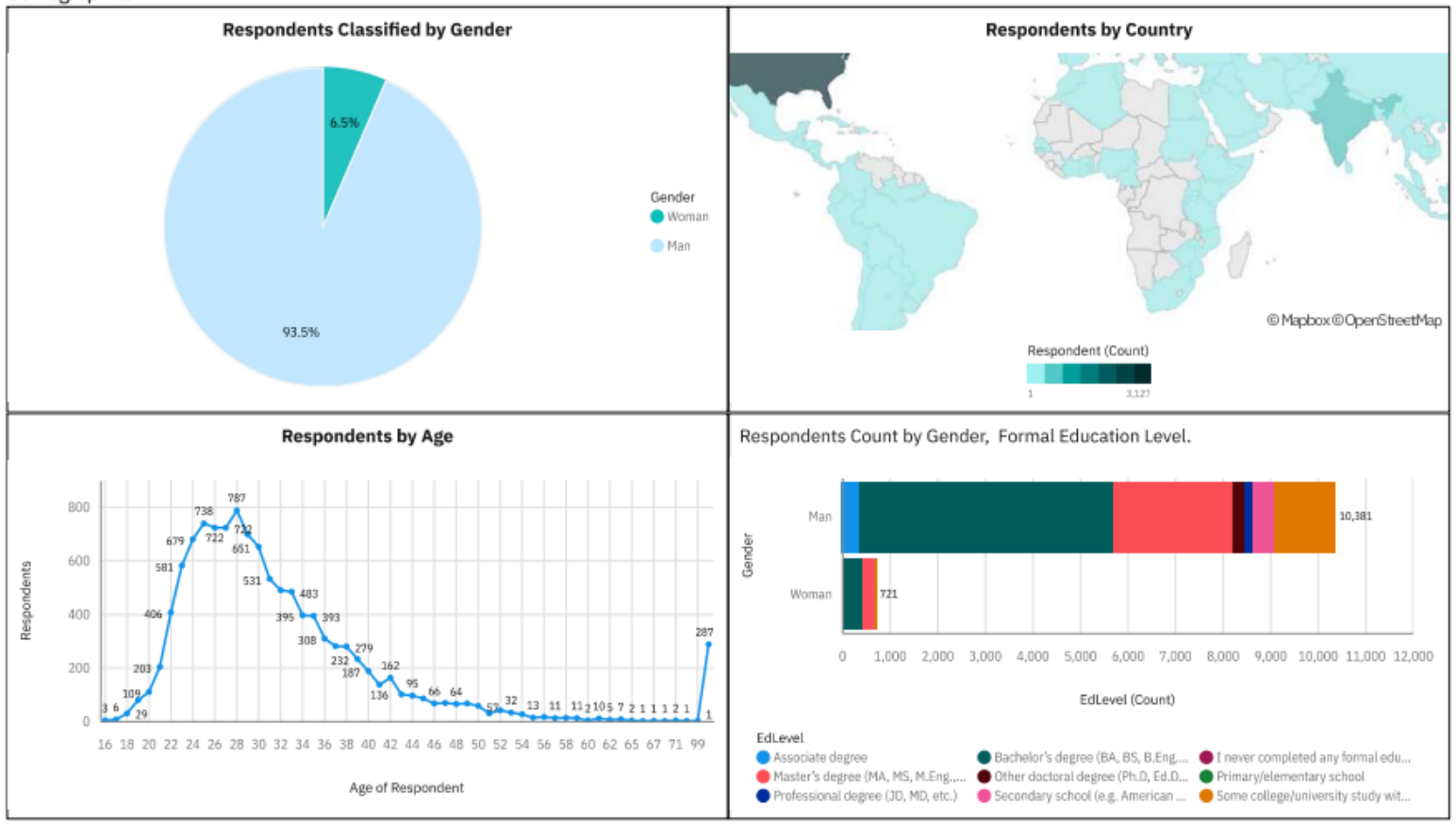


DASHBOARD TAB 2



DASHBOARD TAB 3

Demographics



DISCUSSION

OVERALL FINDINGS & IMPLICATIONS

Findings

- Found that about globally 93% of our respondents are men and 6% are women.
- JavaScript is the most commonly used programming language, but Python has risen in the ranks again.
- jQuery is the most broadly used web frameworks, however React.js now becoming popular.
- Linux, Docker and AWS are the popular platforms that our respondents say they desired to work with.

OVERALL FINDINGS & IMPLICATIONS

Implications

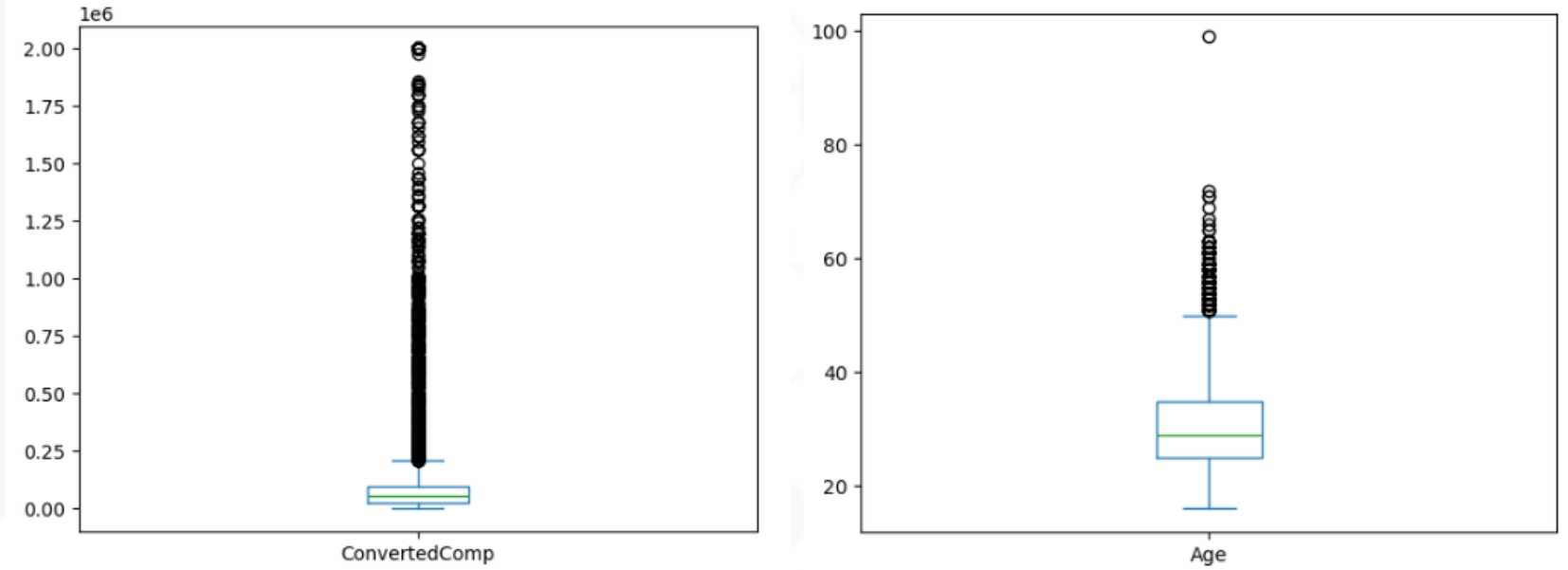
- Programming languages like Python and JavaScript, which are becoming popular in developers.
- Developers tend to move Database technologies like PostgreSQL and MongoDB.

CONCLUSION

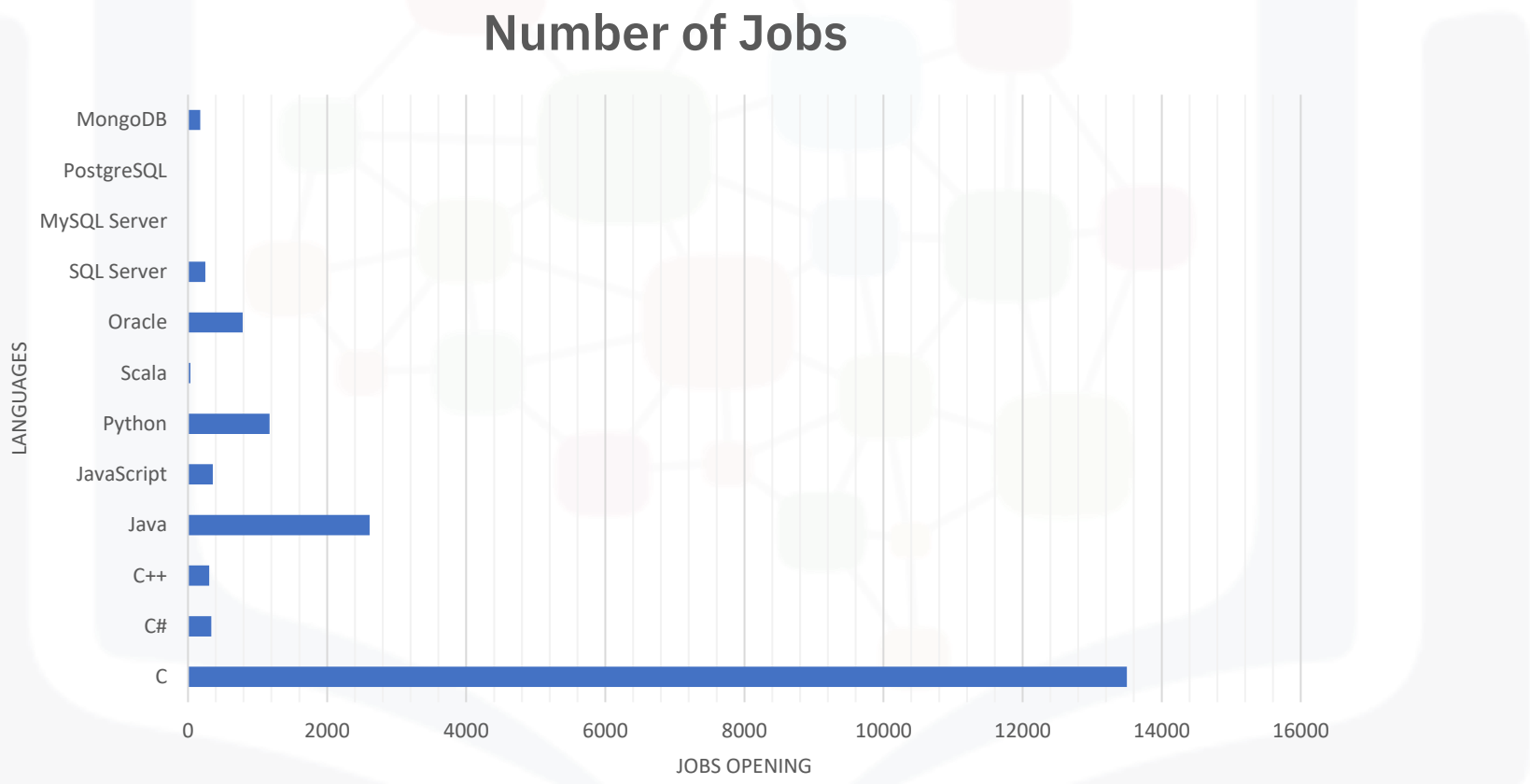
- JavaScript is the most commonly used programming language, but Python has risen in the ranks again.
- jQuery, React.js and Angular is the most broadly used of web frameworks.
- PostgreSQL and MongoDB databases becoming more popular.
- Linux and Windows are the most common platforms that respondents have done development but Docker and AWS now becoming popular.

APPENDIX

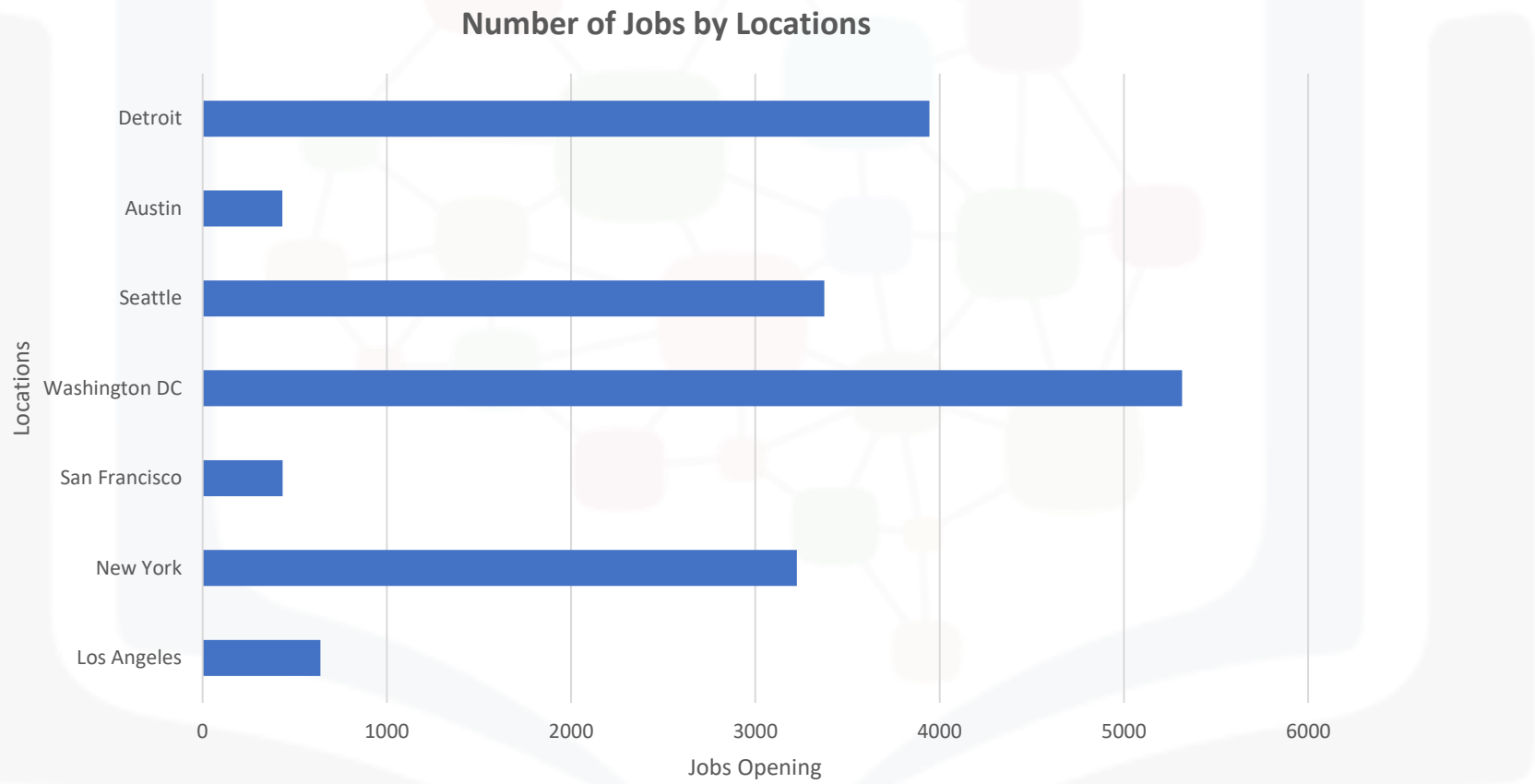
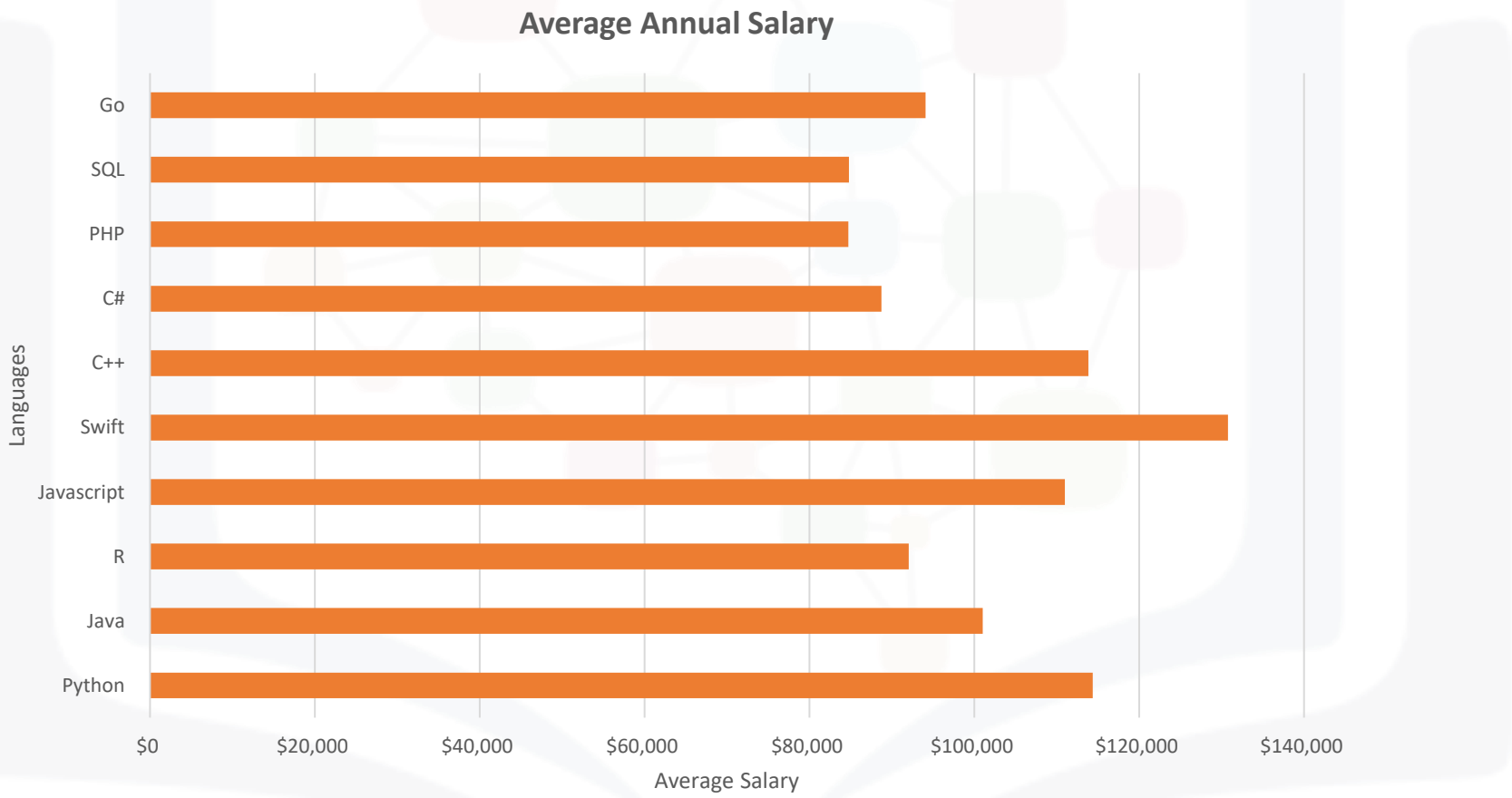
- Outliers exist in the column ConvertedComp and Age



JOB POSTINGS by Languages



JOB POSTINGS by Locations



POPULAR LANGUAGES