# Stack Overflow Developer Survey 2019

ABIN PM

10/01/2023

# OUTLINE

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

IBM **Developer**

SKILLS NETWORK

# EXECUTIVE SUMMARY

- JavaScript, Python, HTML/CSS, SQL, and TypeScript are the most desirable programming languages for next year.

- PostgreSQL, MongoDB, Redis, MySQL, and Elastic Search are the most desirable databases for next year.

- Gender gap in the IT industry.

  - Male = 93.7%

  - Female = 6.3%

IBM **Developer**

SKILLS NETWORK

# INTRODUCTION

- Stack Overflow, a popular website for developers, conducted a survey amongst developers from around the world about technology trends in 2019 based on :
  - I.      Programming Languages
  - II.     Databases

- Target audience:
  - i. IT professionals
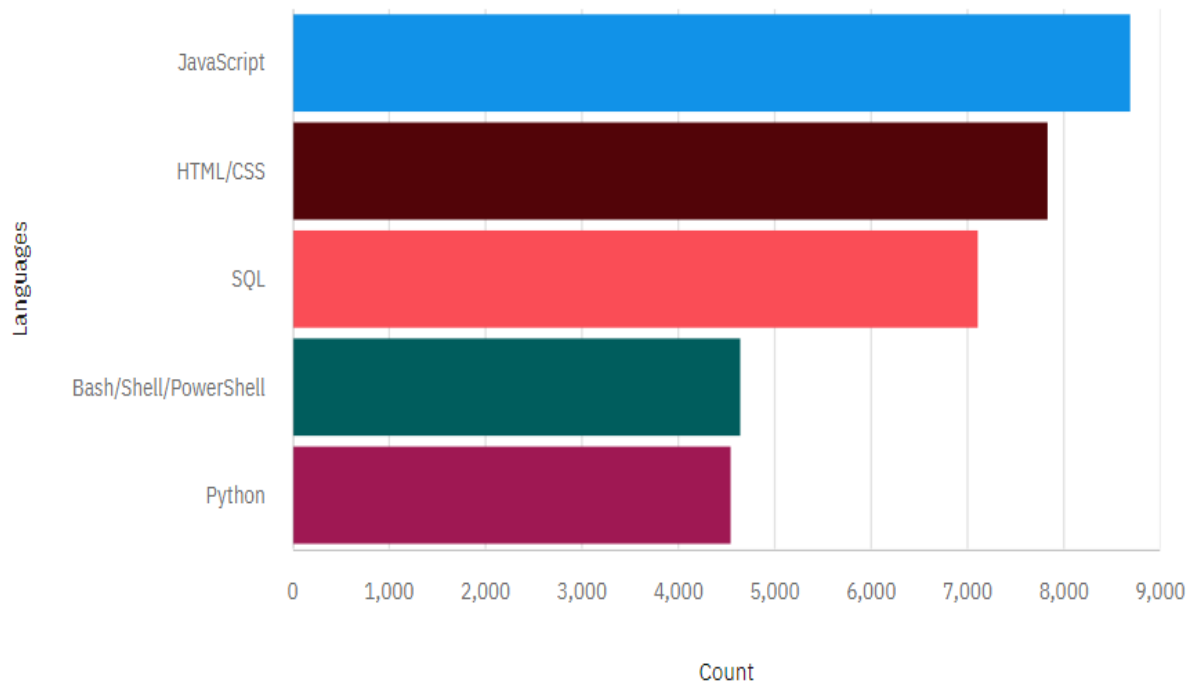  - ii. Anyone interested in the IT field

# METHODOLOGY

- Data Sources:

  i. Stack Overflow Developers Survey 2019

  ii. GitHub Job Posting

  iii. Programming Language Annual Salary

- Data Exploration and Cleaning

  i. Python

- Data Visualization
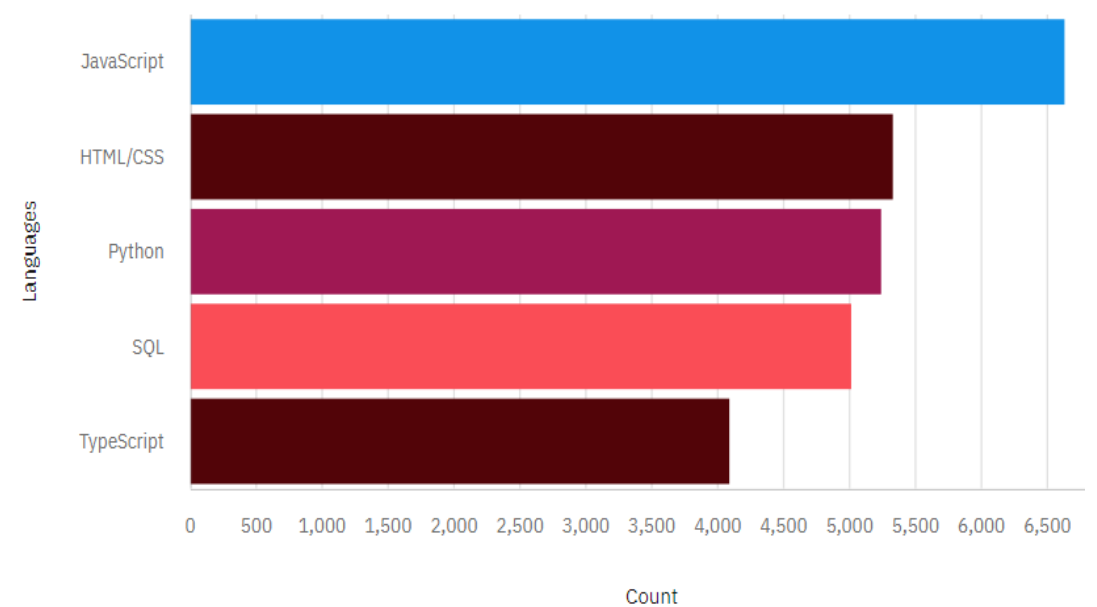
  i. IBM Cognos Analytics

- Presentation

# RESULTS

# PROGRAMMING LANGUAGE TRENDS

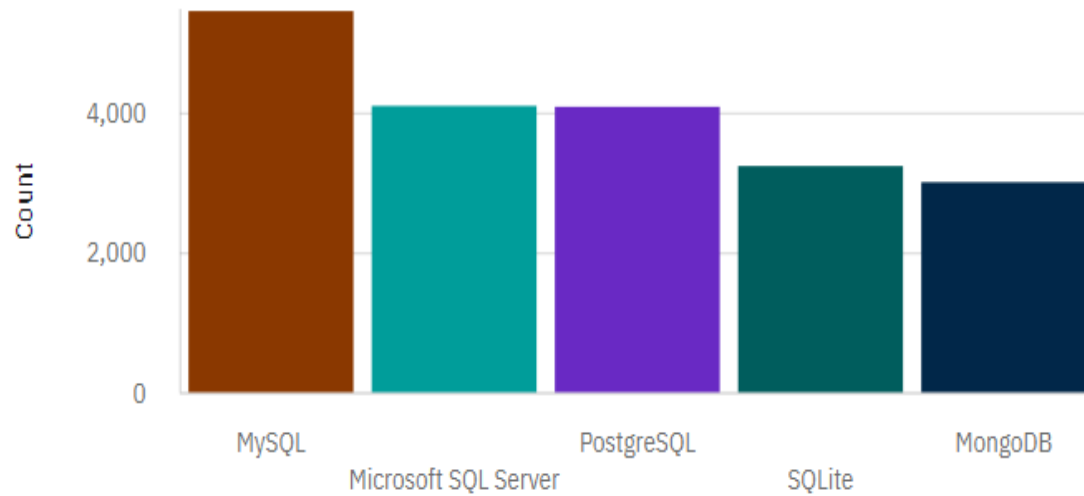# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- JavaScript will be continued to be the most popular language in the current and the next year

- Python and TypeScript will have a rise in popularity in the next year

- Bash/Shell/PowerShell will loose its popularity in the next year
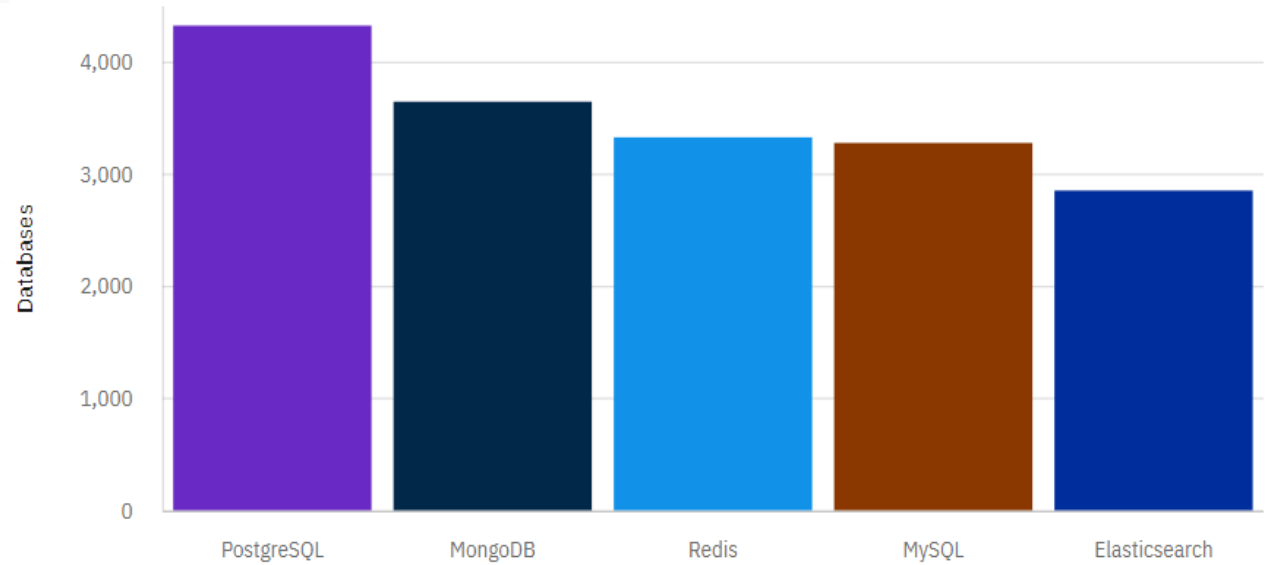
## Implications

- JavaScript is an important programming language for a stack overflow developer in the future years

- Python and TypeScript are the emerging languages in the stack overflow developer community

-  Bash/Shell/PowerShell is outdated in the stack overflow developer community

IBM Developer

SKILLS NETWORK

# DATABASE TRENDS

## Current Year



## Next Year

# DATABASE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- PostgreSQL, MongoDB, Redis and Elasticsearch will have a rise in popularity in the next year

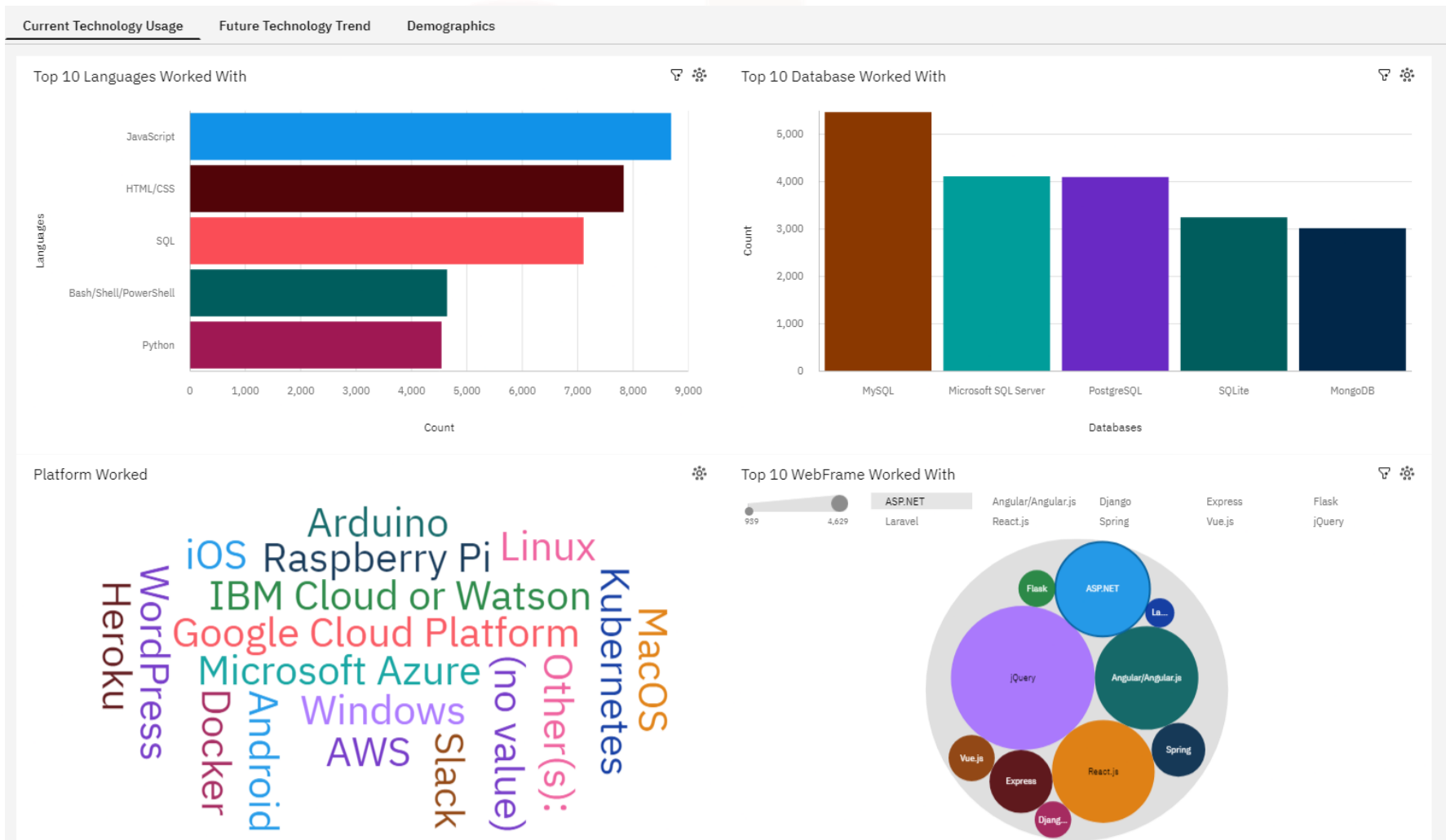- Microsoft SQL server and SQLite will looses its popularity

## Implications

- PostgreSQL, MongoDB, Redis and Elasticsearch are the emerging Databases
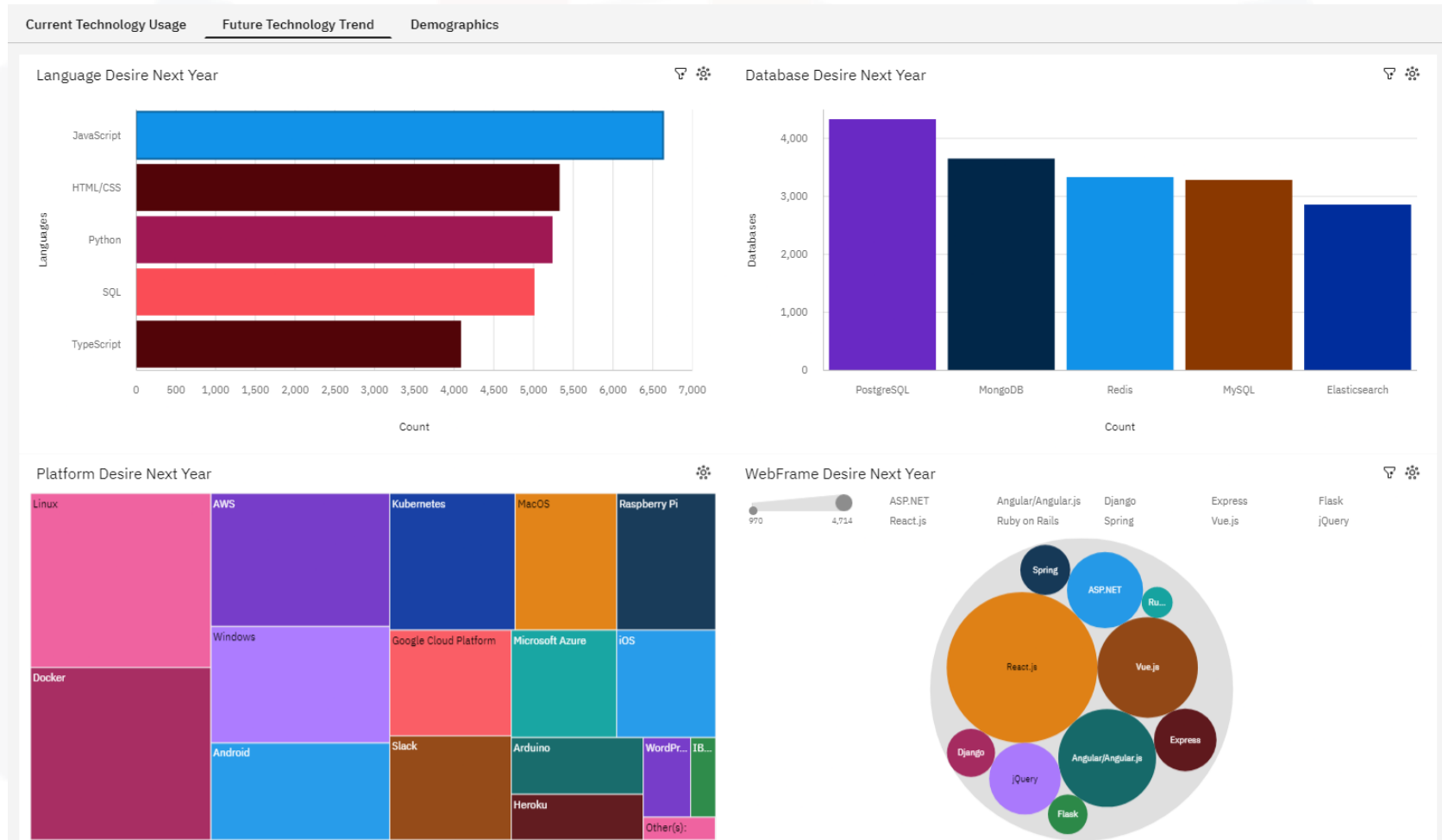
- Microsoft SQL server and SQLite will get outdated

IBM **Dev**uloper

SKILLS NETWORK
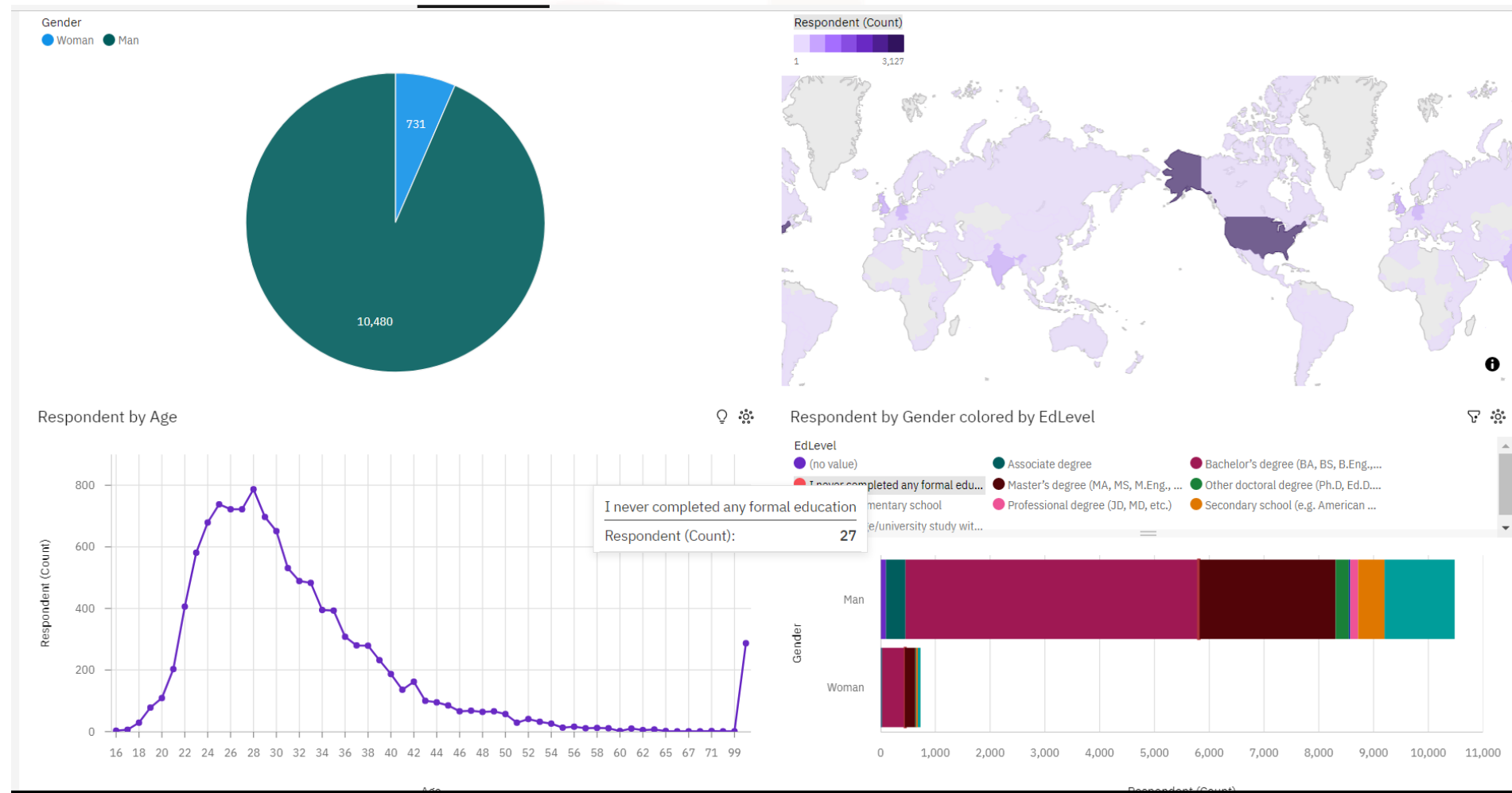
# DASHBOARD

Dashobard  link

# DASHBOARD TAB 1

# DASHBOARD TAB 2

# DASHBOARD TAB 3

# DISCUSSION

# OVERALL FINDINGS & IMPLICATIONS

Findings

- Trends and Demands are fluctuating based on the emerging Technologies
- JavaScript is the most desired language in the next year
- PostgreSQL is the most desired Databases in the next year
- There is sever  Gender Gap in the Industry
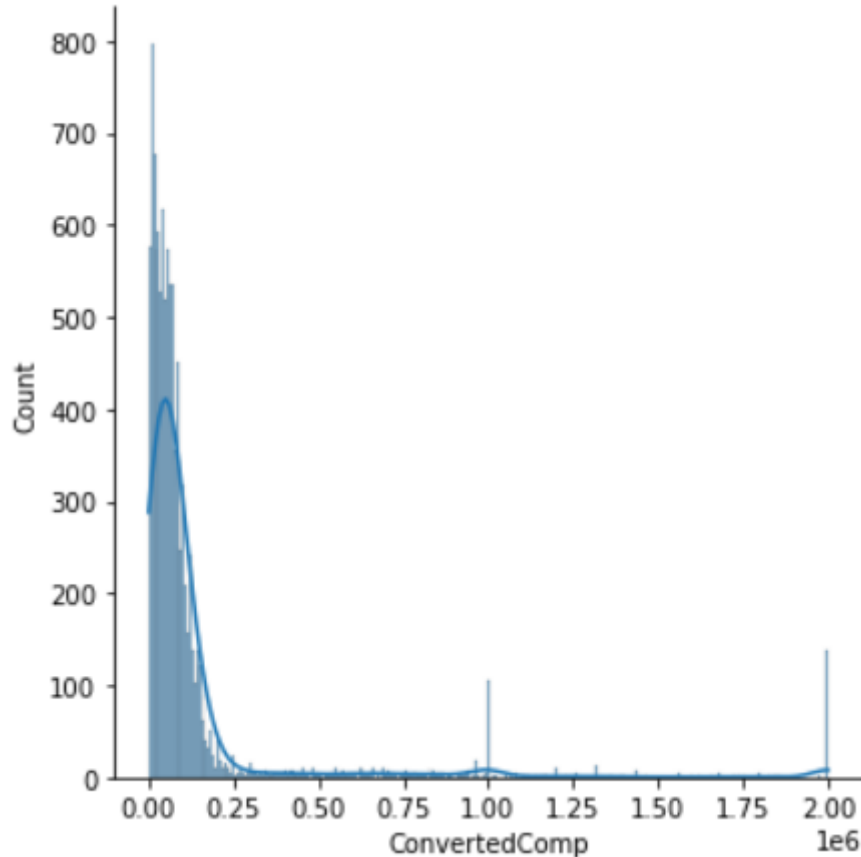
Implications

- IT professional and Companies are adapting to the new technologies
- JavaScript is the most demand skill required developers
- PostgreSQL Databases will have a rise in users  in the coming year
- Gender Gap will affect the Job hiring Trend in the Industry
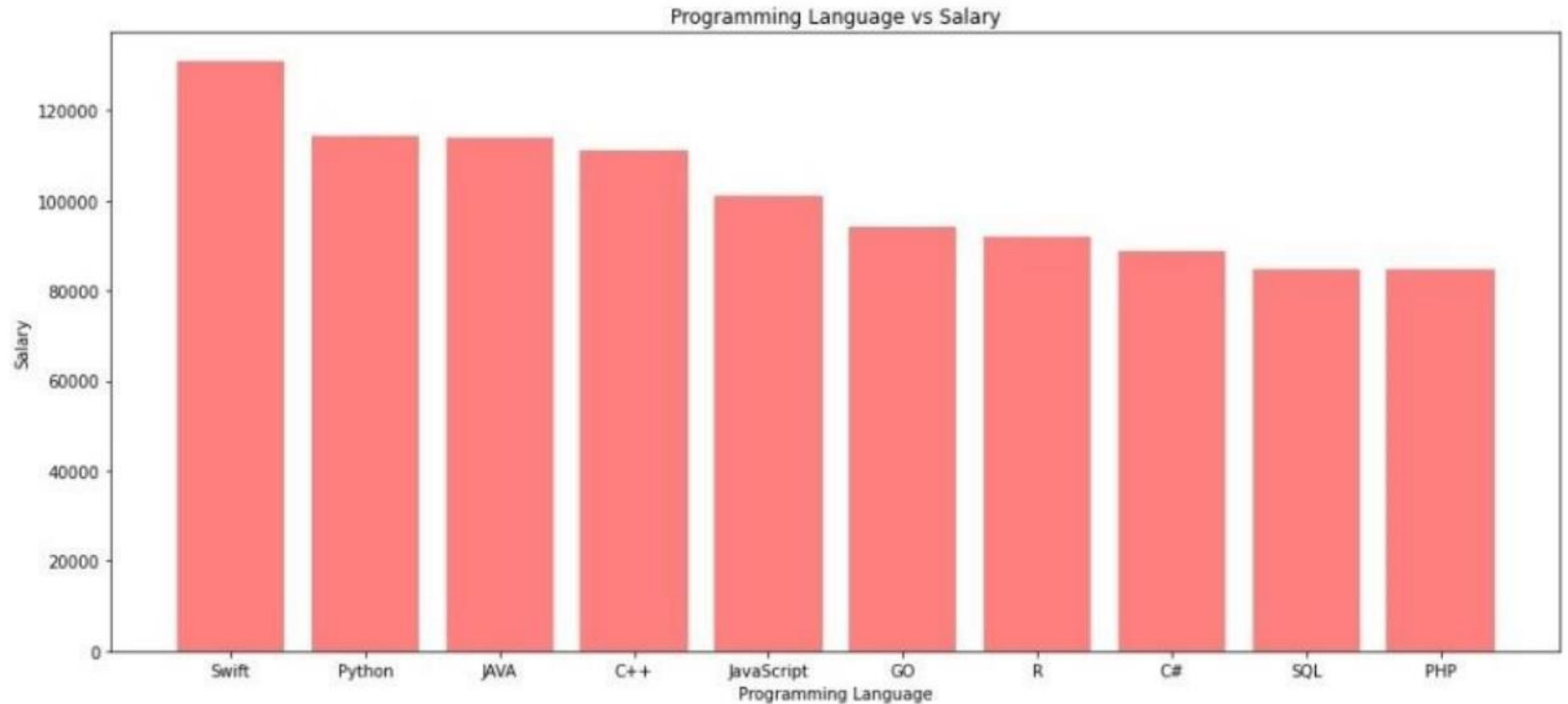
IBM **Developer**

SKILLS NETWORK

# CONCLUSION

- IT industry is constantly adapting to the new Emerging technologies

- JavaScript is having a consistent demand in the industry

- Majority of the programmers have a professional degree

- Majority of the programmers are in the age group between 22 and 35. stack overflow developers are more likely to either choose a different field of work or retire by the age of 36

# APPENDIX



- Majority of the employees are having the 25% of the salary of the most earning employee

- As the salary gets higher the number of employee earing that salary gets decreases

# JOB POSTINGS



Programming Language vs Salary

# POPULAR LANGUAGES



Programing Language vs Postings