



Developer Trends in Technology

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OUTLINE



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 - Dashboard
- Discussion
 - Findings & Implications
- Conclusion
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EXECUTIVE SUMMARY



- Current trends in technology amongst developers
 - Top languages
 - Top databases
 - Platforms
 - Top web frames
- Desired technology amongst developers
 - Top languages
 - Top databases
 - Platforms
 - Top web frames
- Demographic information on developers
 - Gender
 - Country
 - Age
 - Education Level

INTRODUCTION



- With this presentation we will analyze the trends in technology among developers. It will cover the current technology trends, desired technology, and the demographics of the developers.
- This analysis will aide in making data driven decisions in regards to the technologies that should be invested in when it comes to hiring new developers or training.
- The demographic information analyzed will aide in characterization of developers around the world.

METHODOLOGY



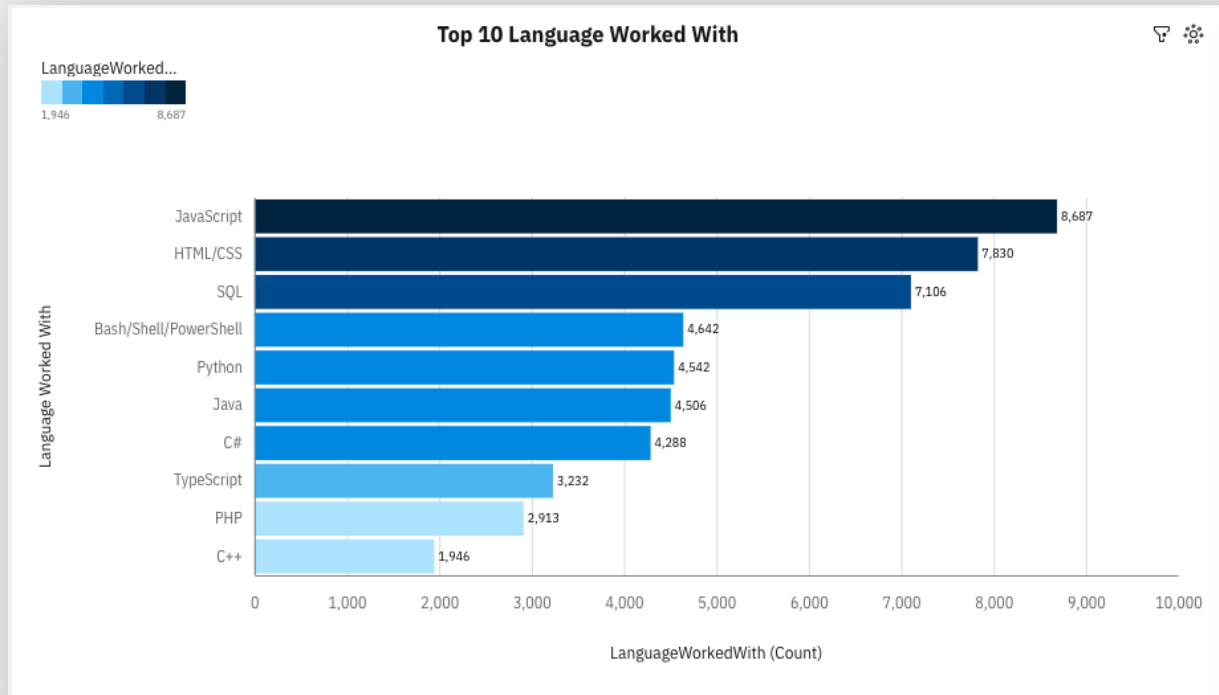
- Datasets
 - Stack Overflow Developer Survey
 - GitHub Jobs API
- Collection Methods
 - API
 - Web Scraping
- Data Cleaning
 - Normalization of data
 - Removing duplicate and null values
- Data exploration/visualization
 - Python
- Dashboard
 - IBM Cognos

RESULTS

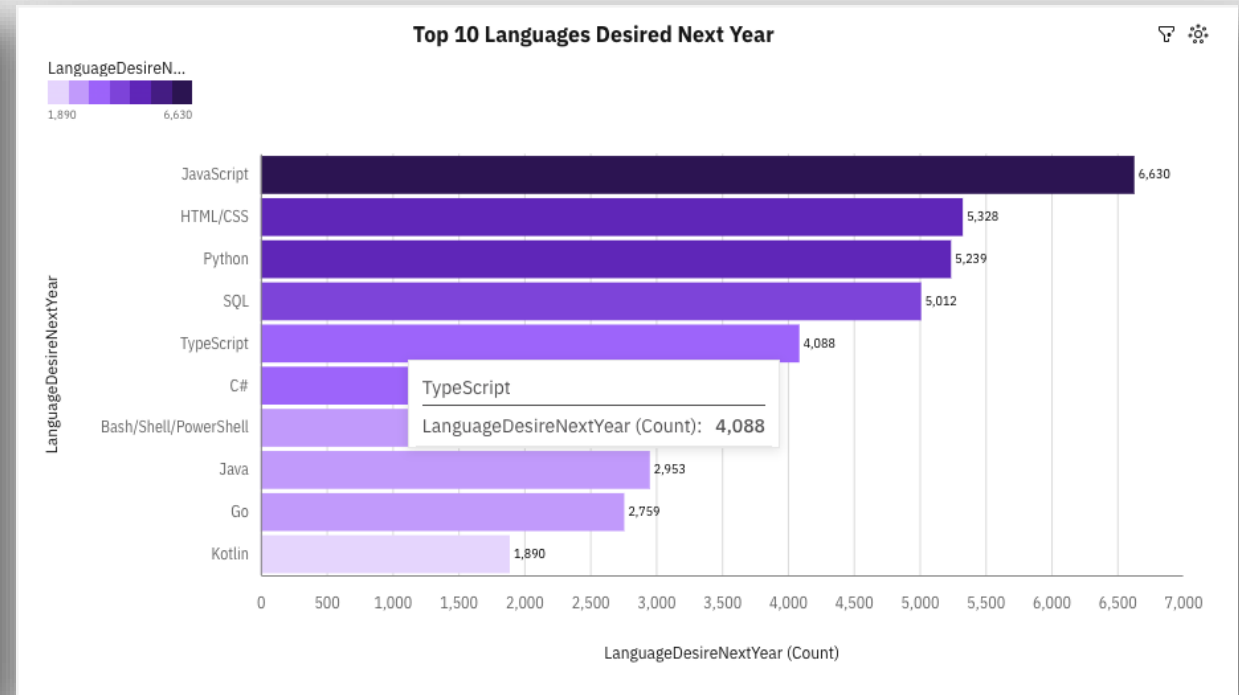


PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

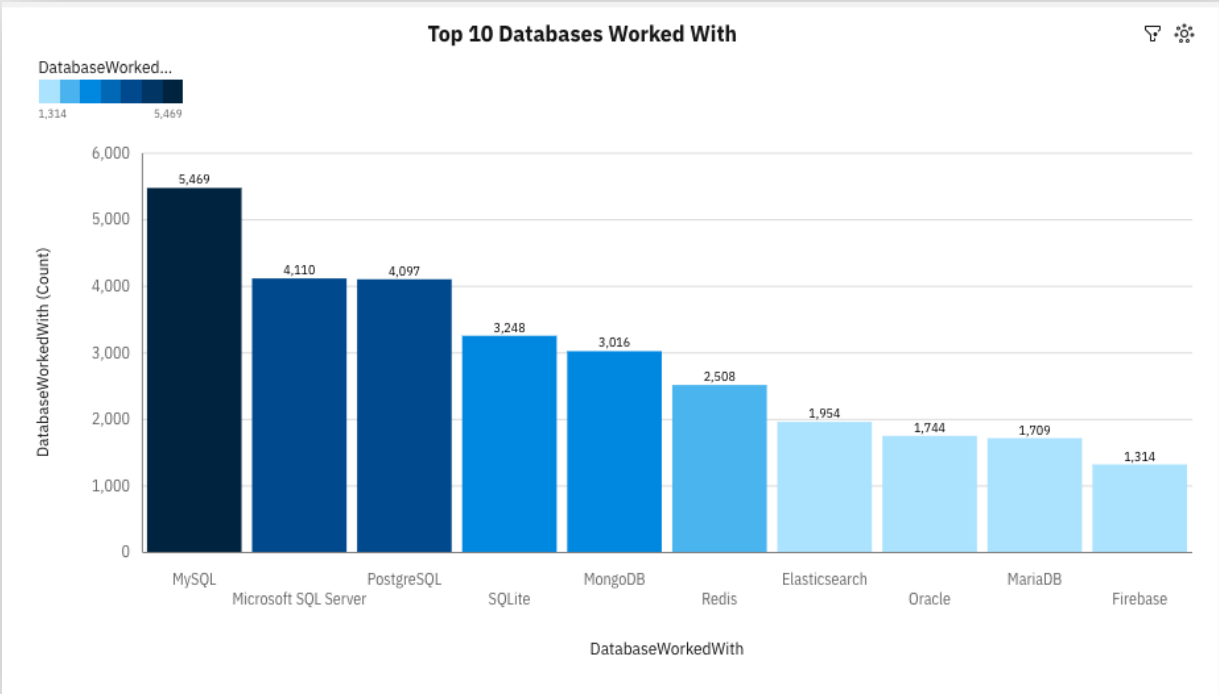
- Increase in interest of Python language
- Highest interest in web development languages such as HTML/CSS and JavaScript
- Increase in interest of Kotlin
- Decrease interest in C++

Implications

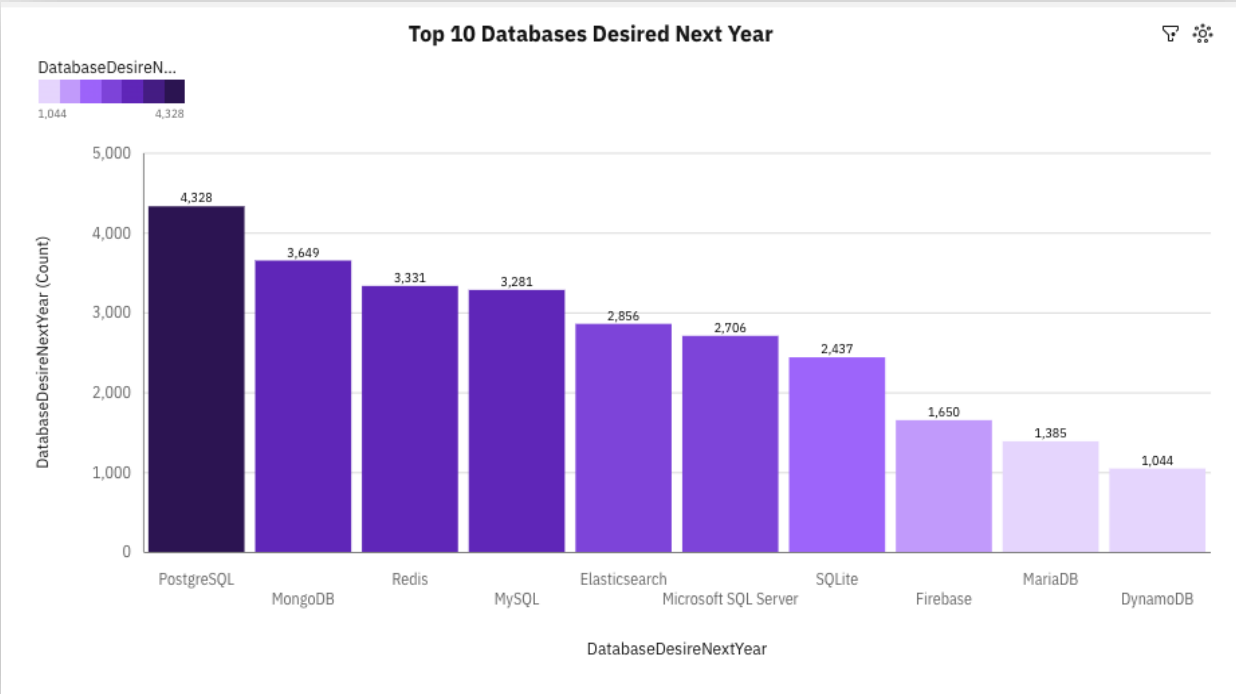
- Increase in interest in data science, machine learning and AI
- Web development continues to be a popular route for developers
- Developers are becoming more interested in mobile development
- C++ may not be a good language to invest in

DATABASE TRENDS

Current Year



Next Year



DATABASE TRENDS - FINDINGS & IMPLICATIONS

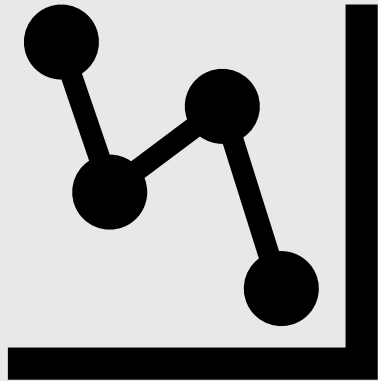
Findings

- Increase in interest of more modern databases
- Decrease in interest of MySQL and Microsoft SQL Server
- Oracle is no longer a top desired database
- Redis has increased in desire

Implications

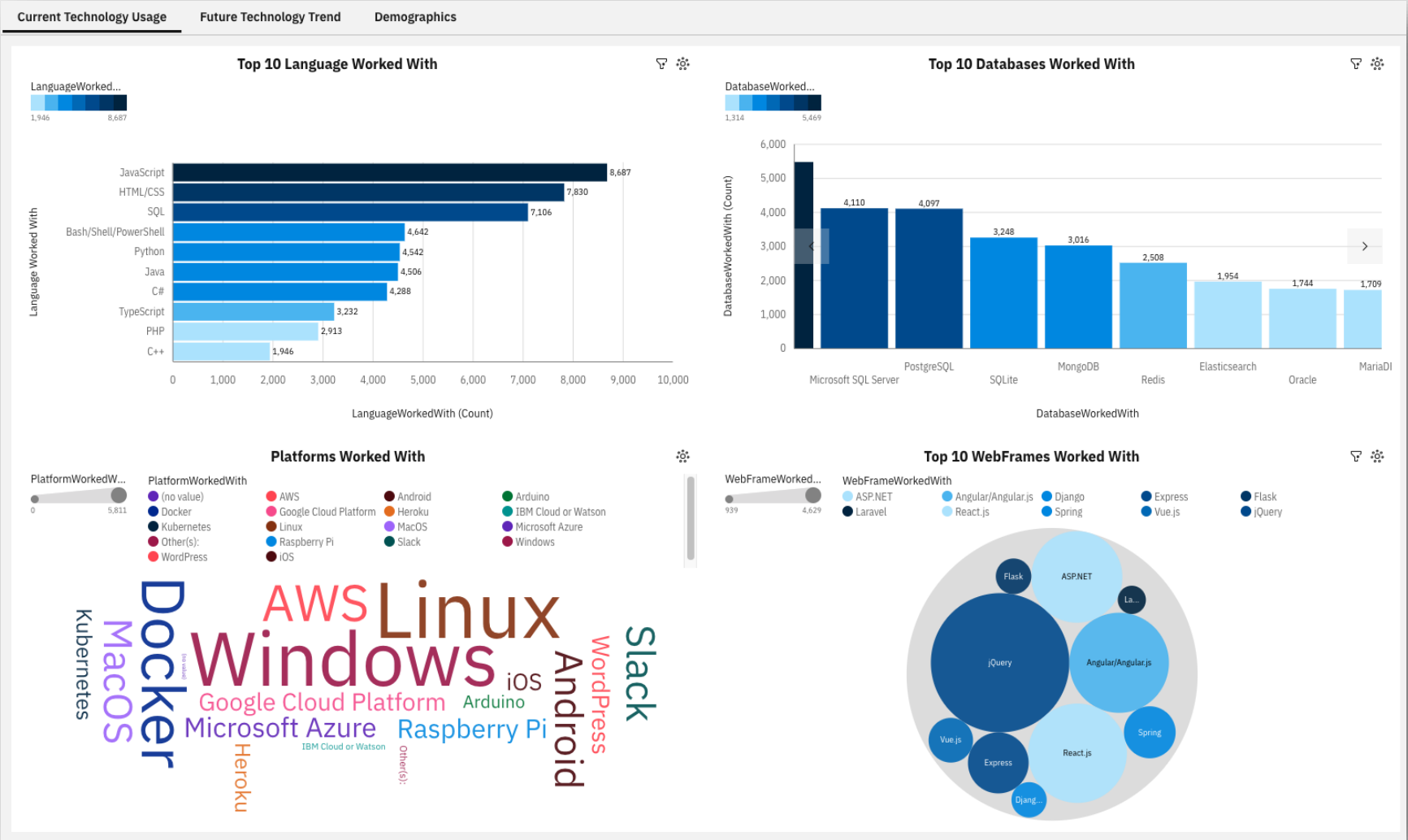
- Could be beneficial to shift investment to PostgreSQL and MongoDB
- No longer investing in oracle training/usage would be a good financial decision
- Invest in Redis training

DASHBOARD

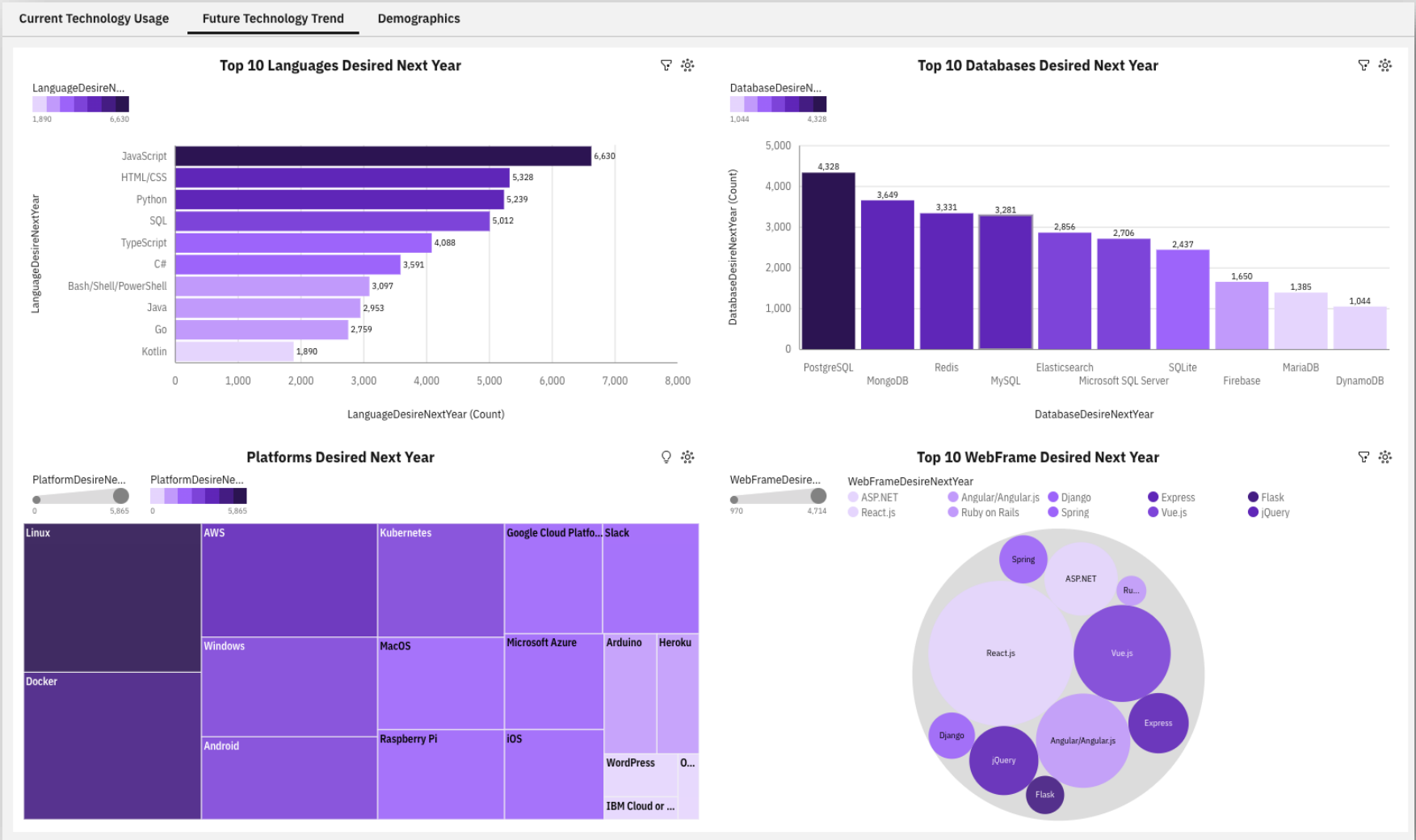


<https://github.com/BrenBliss/>

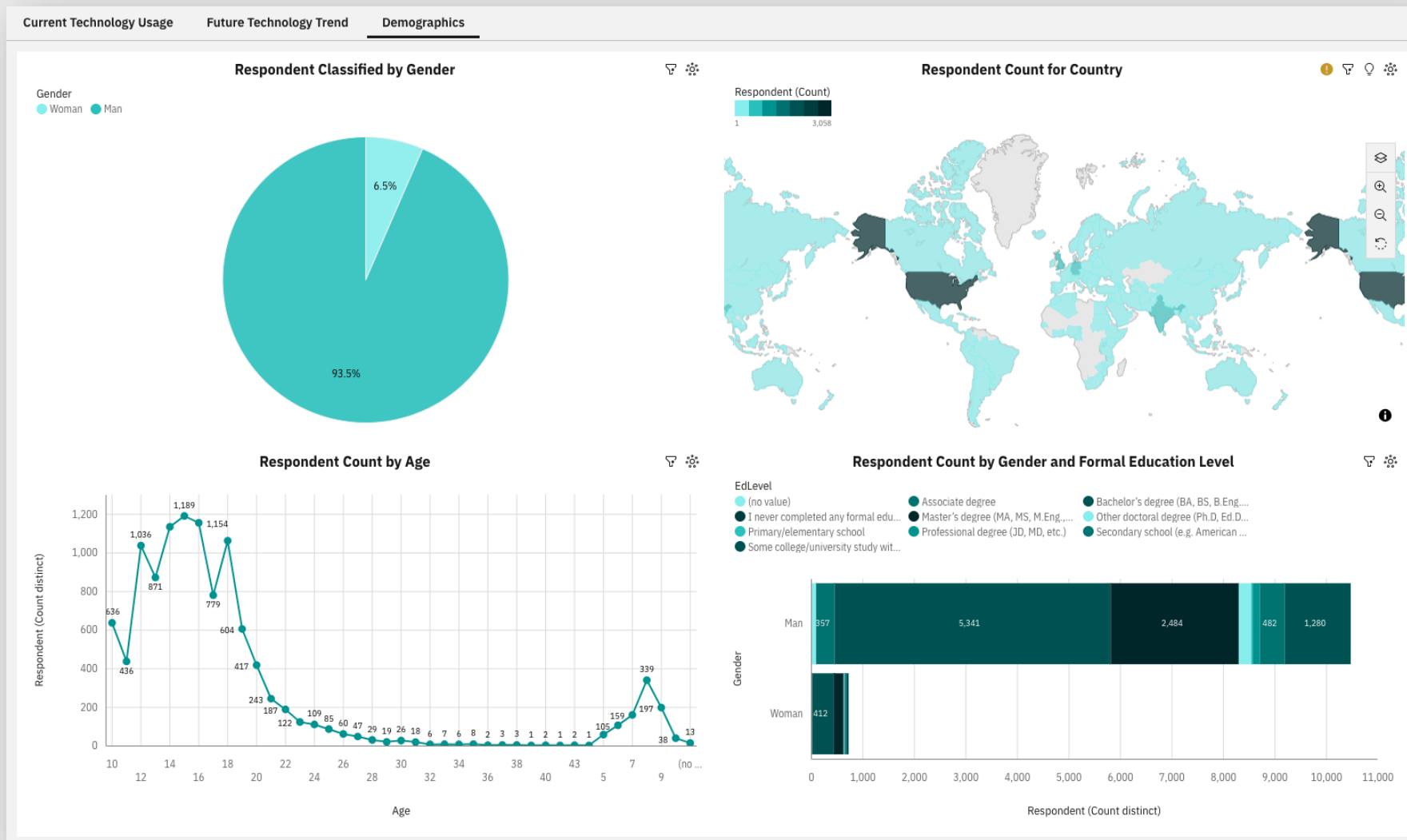
Current Technology Usage



Future Technology Trend



Demographics



OVERALL FINDINGS & IMPLICATIONS

Findings

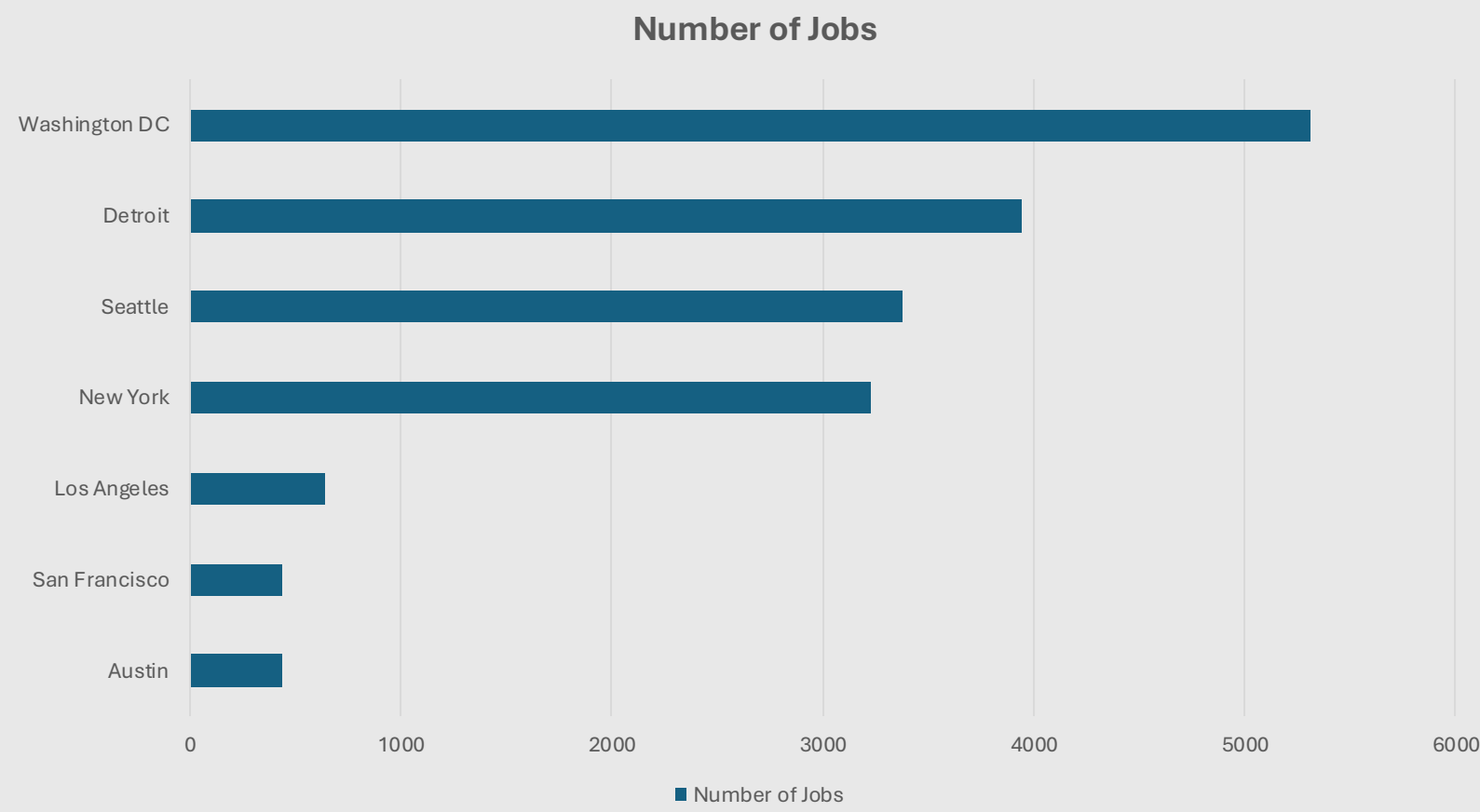
- Web development languages continue to be the leading desired language with an increased desire in Python
- The majority of the developers are men with only 6% being women
- Developers seem to reside most in the United States and India
- Modern databases are becoming more popular and desired

Implications

- Continuing to invest in web development trainings/hirings along with incorporating more data driven training
- Investments in "Women in Technology" style seminars should be made to encourage more involvement from women
- Companies should consider allowing remote work if not located in the United States or India
- Consider investing in more modern technologies

APPENDIX

Developer Job Postings by City in US



Popular Programming Languages Amongst Developers

