



Data Analyst Capstone Project

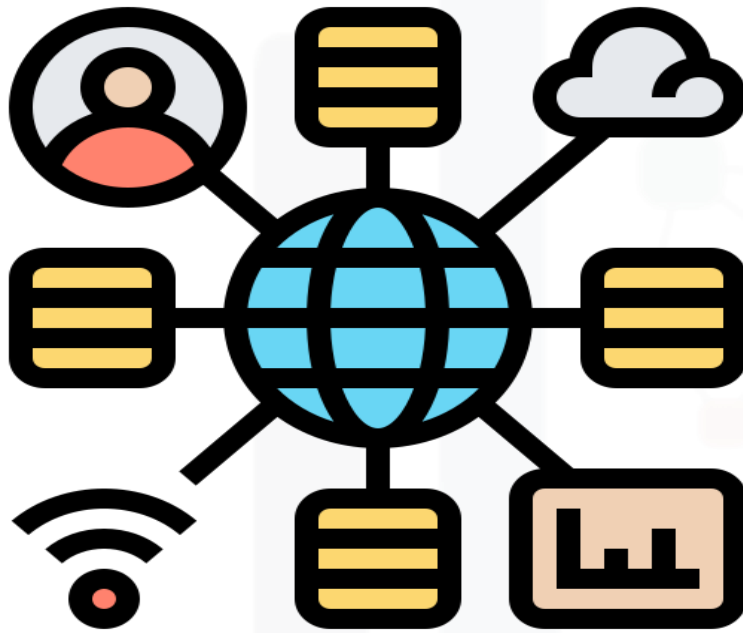
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OUTLINE



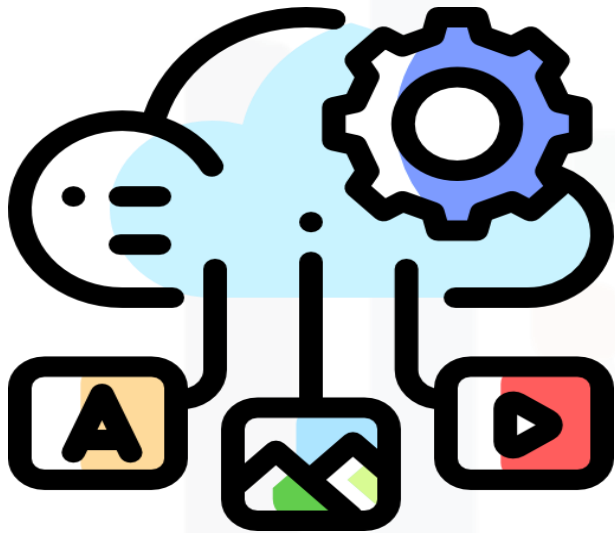
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EXECUTIVE SUMMARY



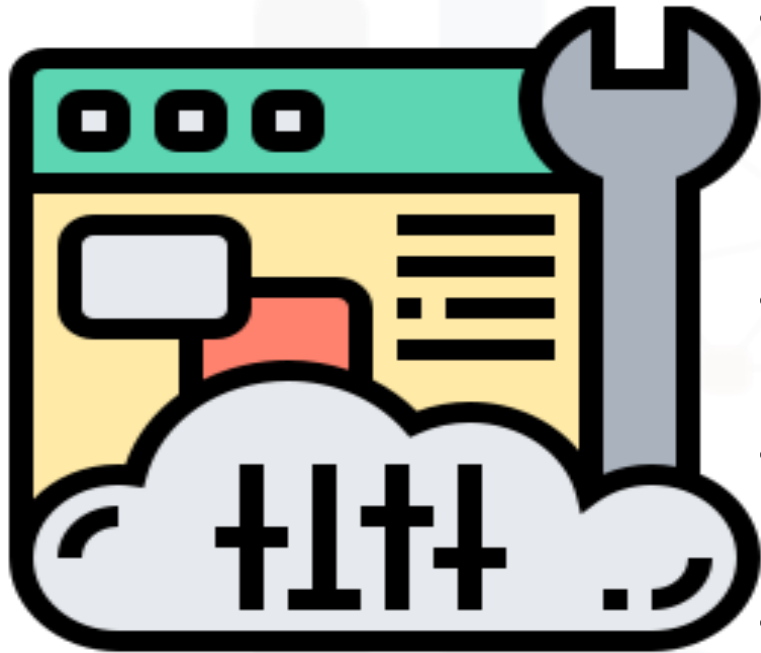
- Are you interested in pursuing a career in tech? If so, you're in luck! JavaScript, Python, HTML/CSS, SQL, and TypeScript are the most in-demand programming languages in the industry today.
- And when it comes to databases, PostgreSQL, MongoDB, Redis, MySQL, and ElasticSearch are the ones to know. But there's a catch - the IT industry has a persistent gender gap.
- Join us as we explore the challenges and opportunities for women in tech, and find out what you can do to help bridge the gap.

INTRODUCTION



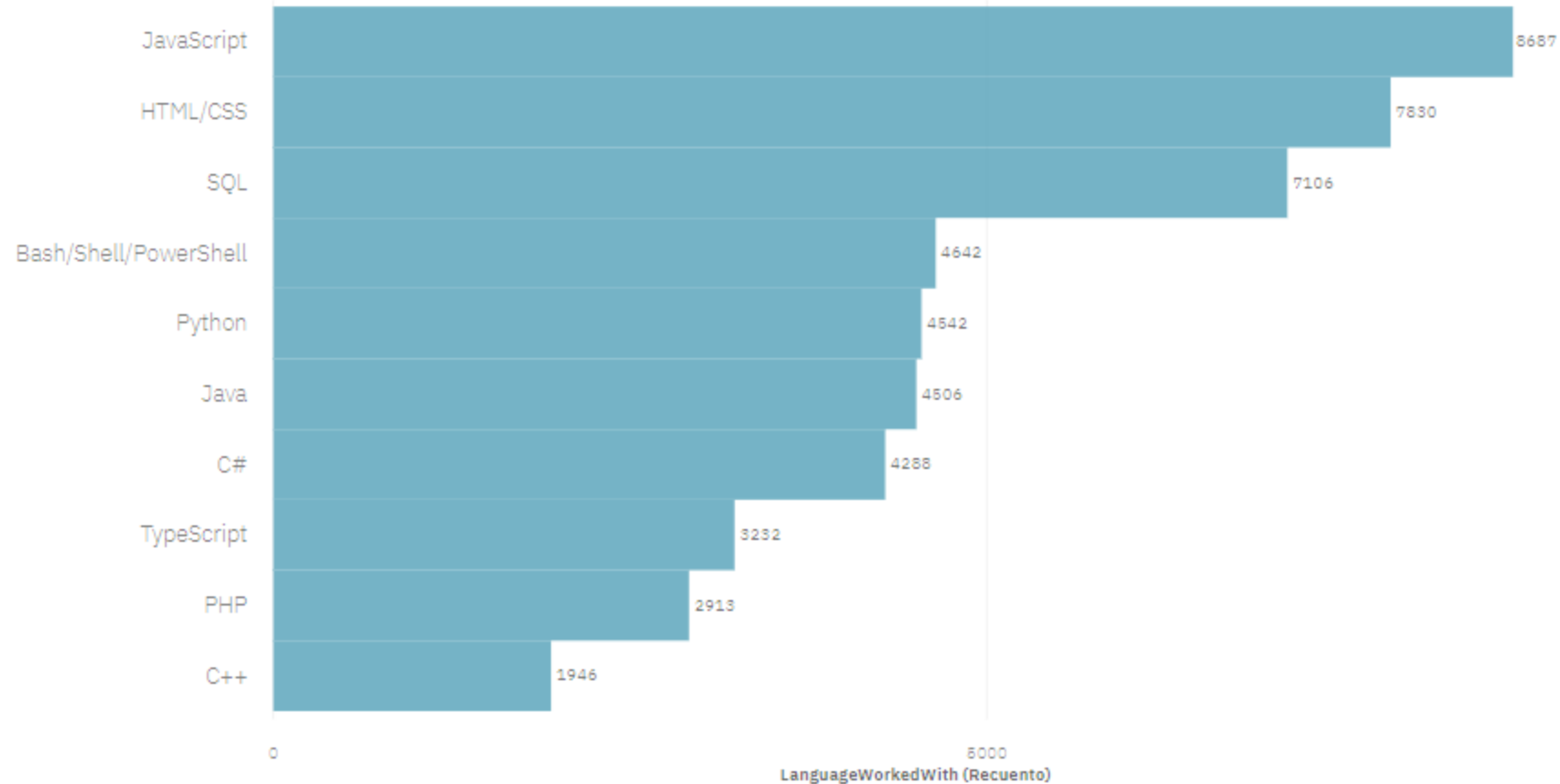
- Stack Overflow surveyed developers about technology trends in 2019. The results are useful for IT professionals and individuals in the IT field who want to stay up-to-date with the latest industry developments.
- Target audience:
 - Software developers: The survey results can provide valuable insights for software developers.
 - IT managers: IT managers can use the survey results to inform their decision-making.
 - Tech entrepreneurs: Entrepreneurs who are interested in starting a tech-related business can benefit from the survey results.

METHODOLOGY



- Data Sources:
 - Stack Overflow Survey 2019
 - Github Job Posting
 - Programming Language Annual Salary
- Data Exploration and Cleaning
 - Python
- Data Visualization
 - IBM CognosAnalytics
- Presentation

PROGRAMMING LANGUAGE TRENDS



PROGRAMMING LANGUAGE FINDINGS & IMPLICATIONS

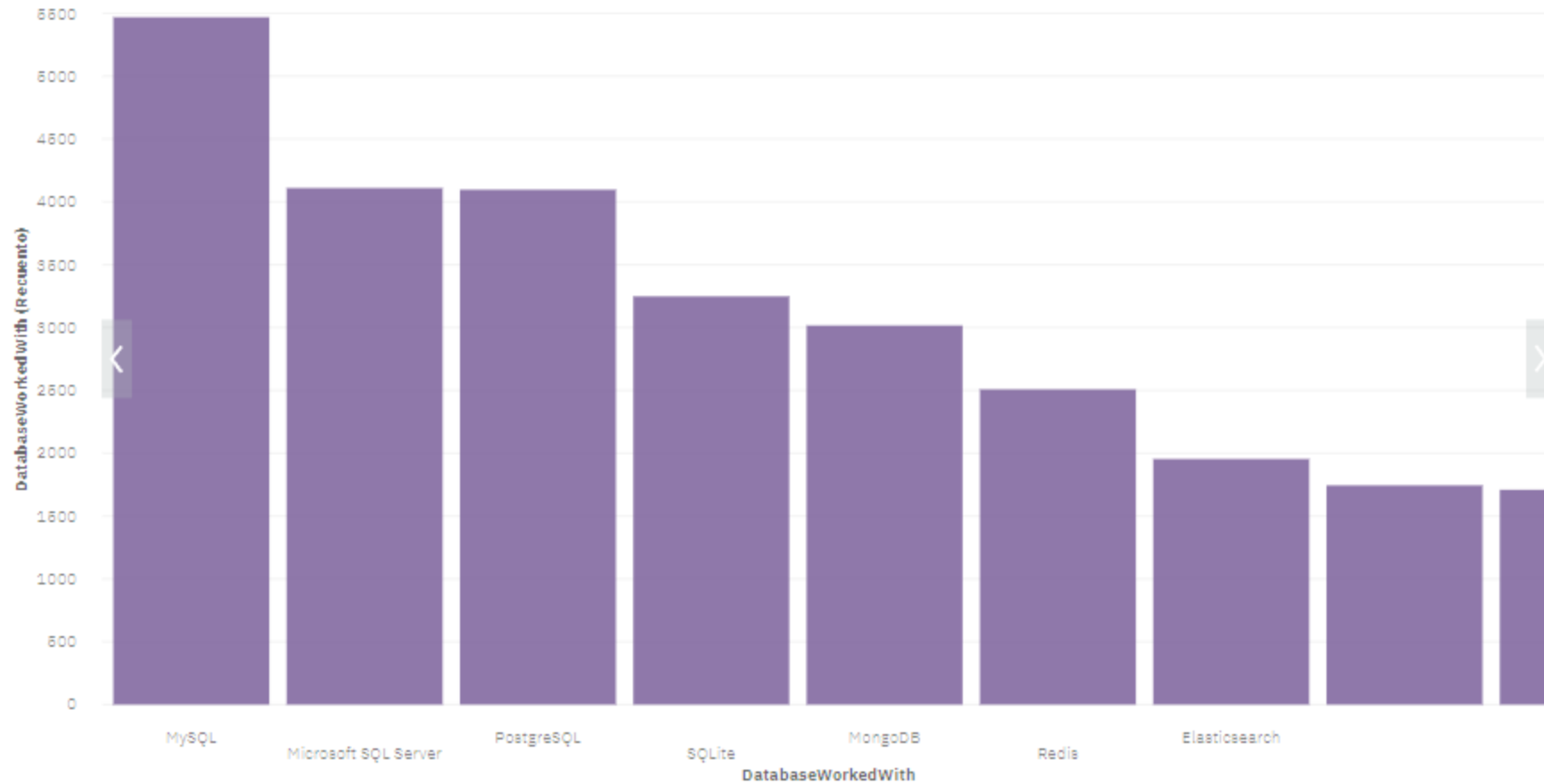
Findings

- JavaScript is the most demanded programming language, followed by Python, HTML/CSS, and SQL.
- TypeScript is gaining popularity and has surpassed Bash/Shell/PowerShell in desirability.

Implications

- The future of web development looks bright for Python, HTML/CSS, Java, and SQL.
- Web development jobs requiring Python, HTML/CSS, Java, and SQL are on the rise.
- The demand for web development skills remains strong.

DATABASE TRENDS



DATABASE FINDINGS & IMPLICATIONS

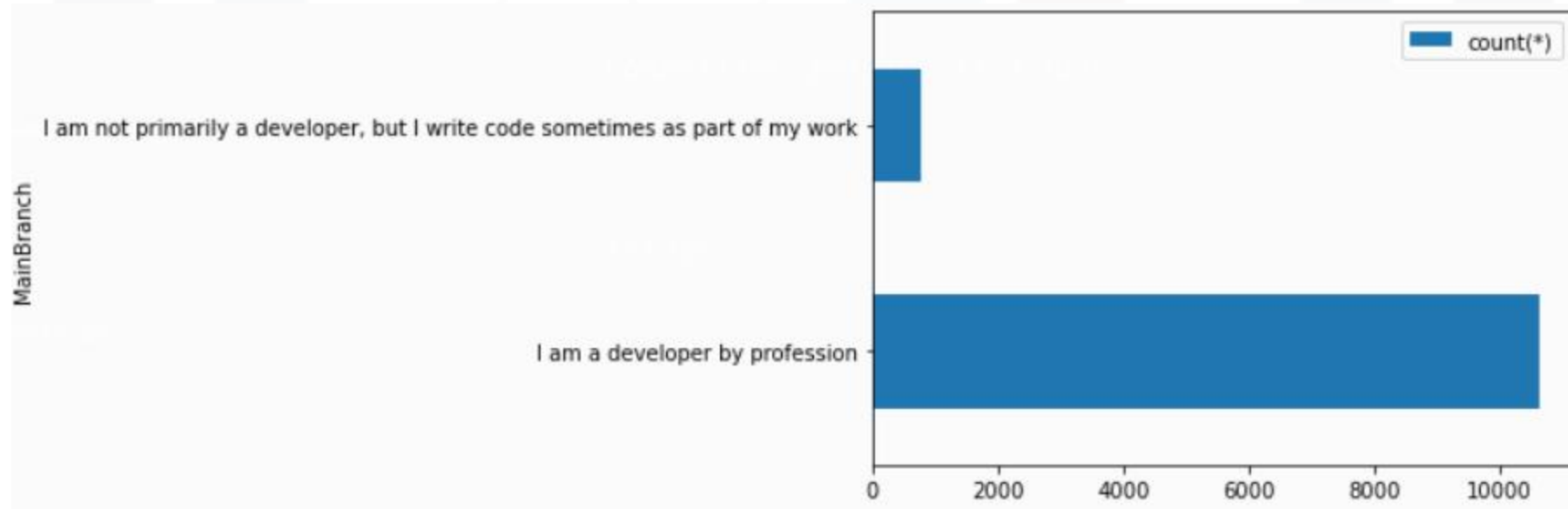
Findings

- PostgreSQL and MongoDB are seeing increased demand, while MySQL is experiencing a decline.
- Redis and Elasticsearch are becoming more popular, with a growing number of developers expressing interest in these technologies.
- The database landscape is shifting, with PostgreSQL and MongoDB gaining traction and MySQL losing ground.

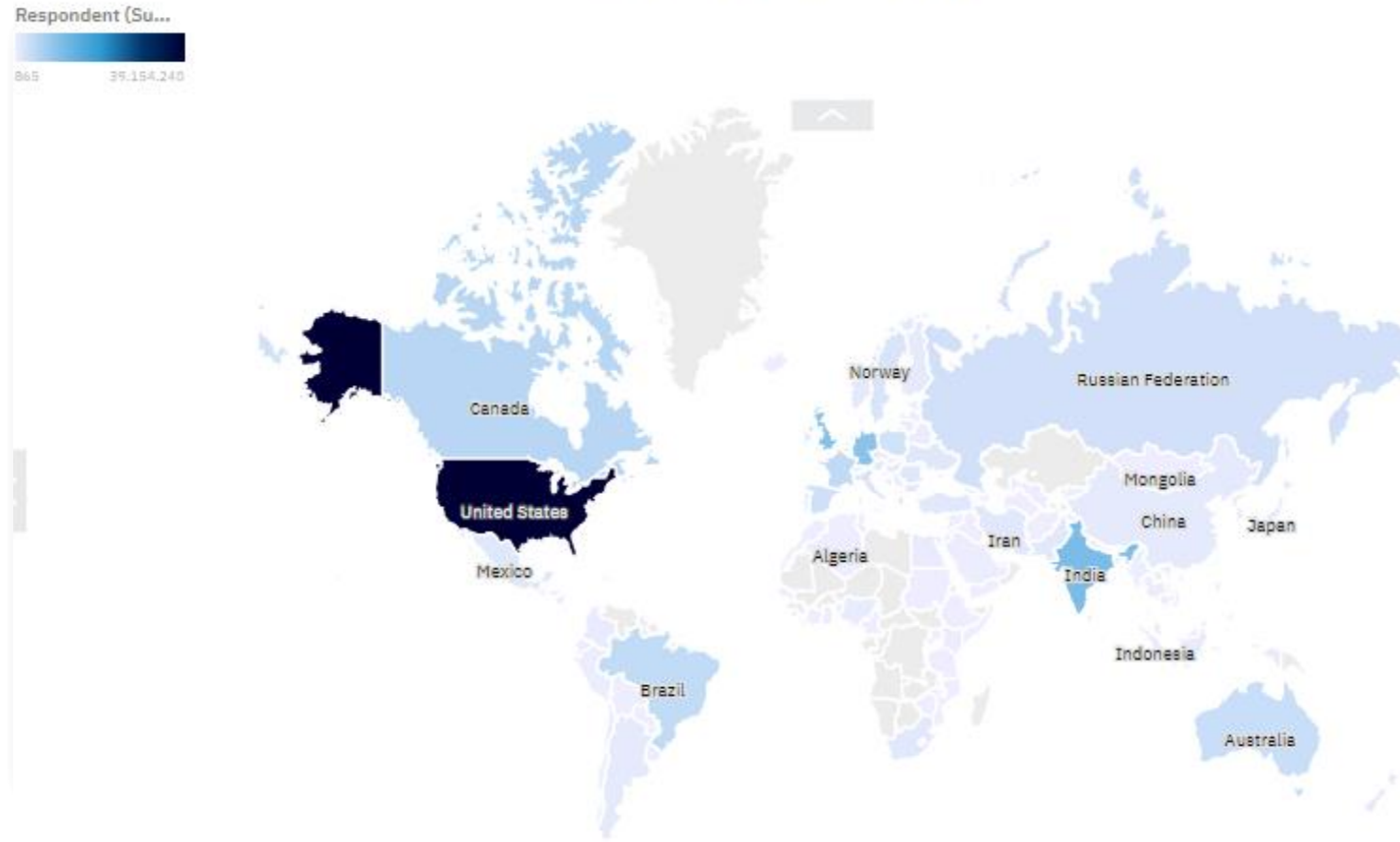
Implications

- PostgreSQL and MongoDB are consistently in demand.
- Open source databases are the preferred choice.

PERCEPTION OF POSITIONS



DEMOGRAFICTS FACTS

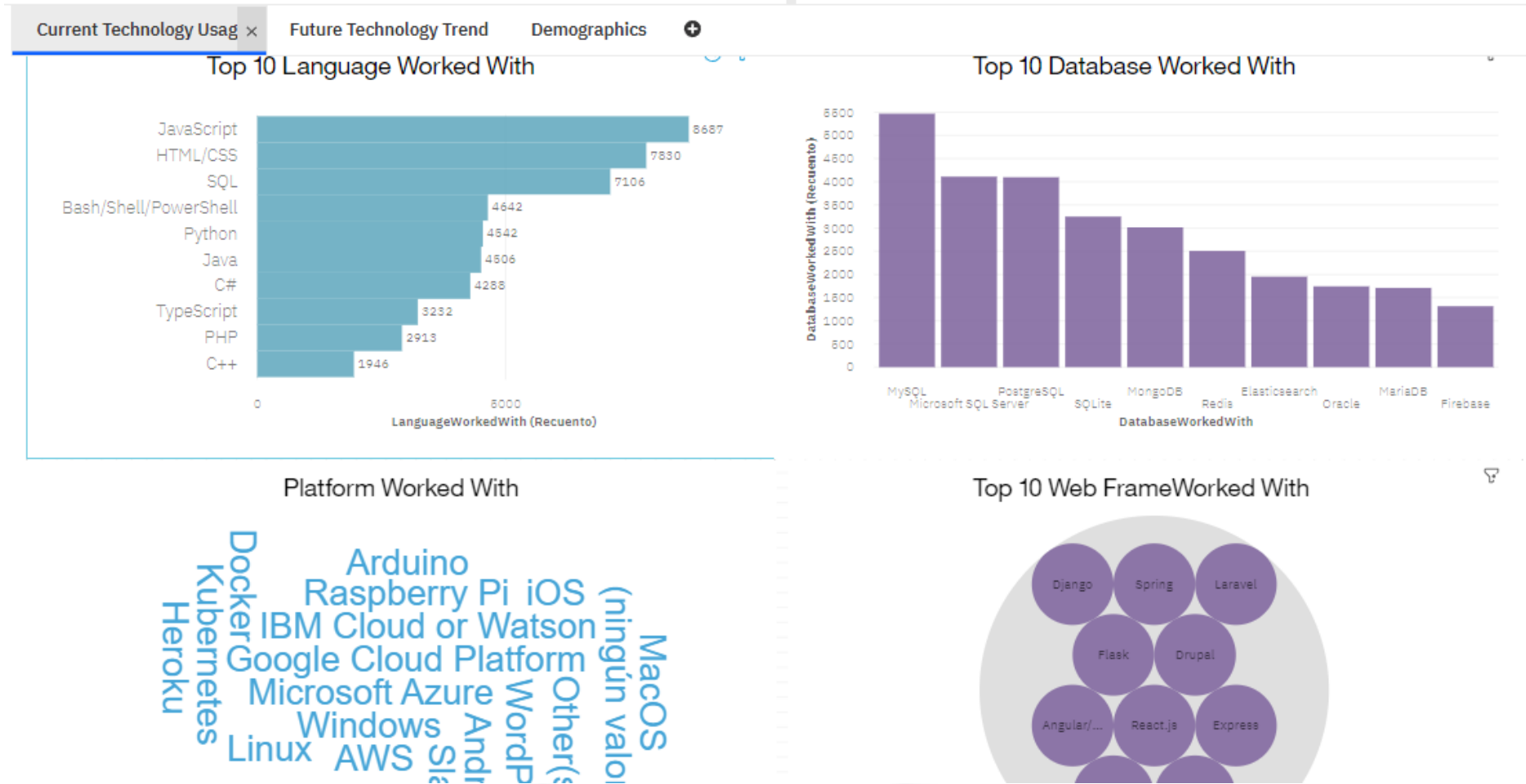


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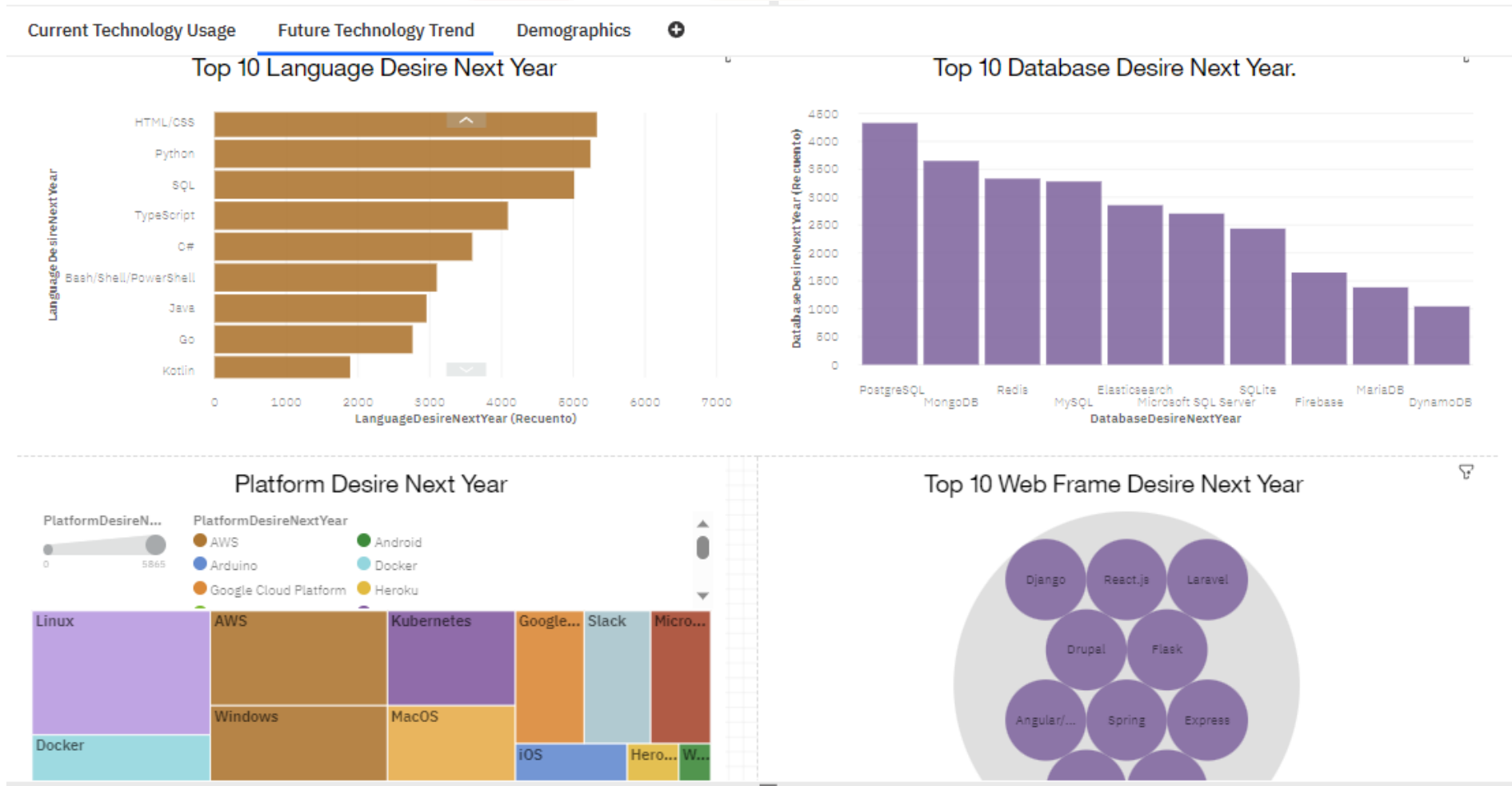


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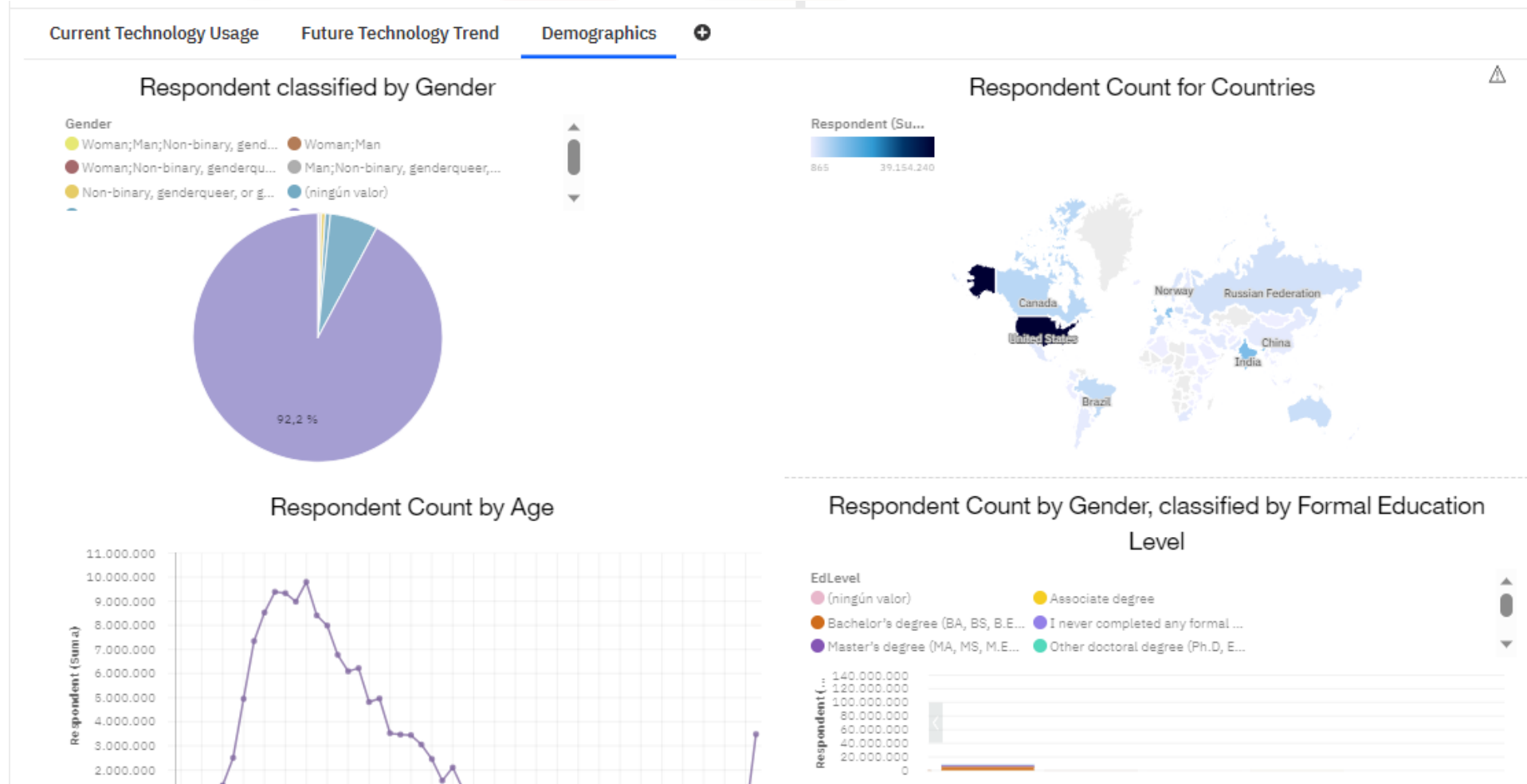
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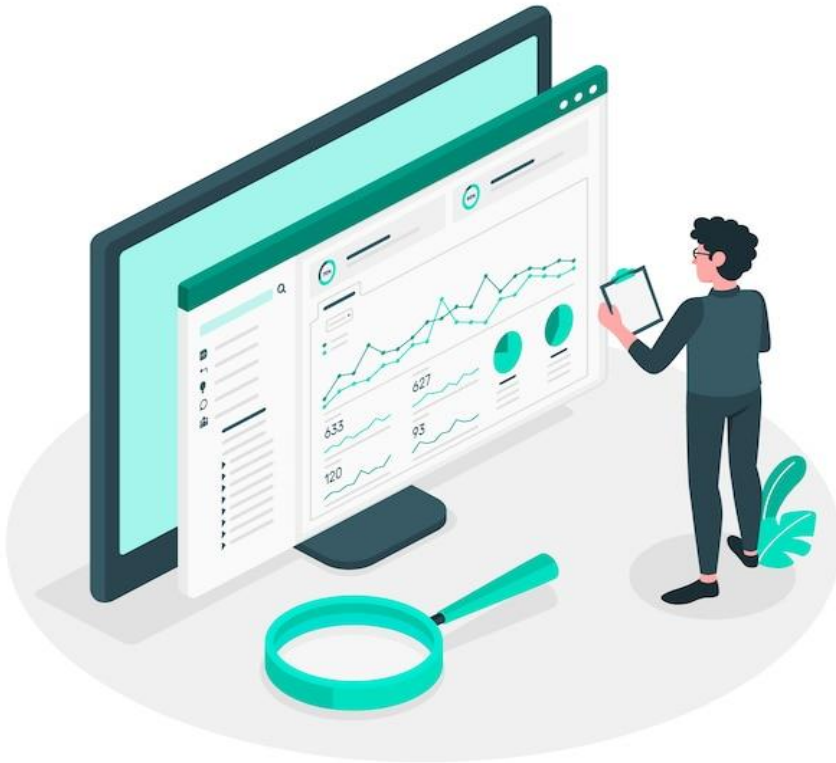
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DISCUSSION



- The IT industry is constantly evolving, with new technologies emerging and changing demand.
- The industry needs to diversify to address the gender gap.
- There is a high demand for developers.

FINDINGS & IMPLICATIONS

Findings

- Technology trends and demands can change with new advancements.
- JavaScript and Python are popular programming languages.
- PostgreSQL is a popular database.

Implications

- Companies and individuals must adapt to changing demands.
- Proficiency in in-demand skills can lead to more opportunities.
- Continuous learning and upskilling are necessary to stay relevant in the job market.

CONCLUSION



- New technologies create diverse trends and demands.
- JavaScript and Python are the most popular programming languages.
- PostgreSQL is the most popular database.
- The IT field requires diversity.
- Continuous learning and upskilling are necessary to stay relevant in the IT field.