



# Emerging Skills Trends

Capstone Presentation

Dora Silva

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# OUTLINE

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

# EXECUTIVE SUMMARY

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- Identify future programming skills requirements
- Methodology
  - Collect & analyze data from job postings & surveys
  - Data Visualization Analysis
  - Determine trends

# INTRODUCTION

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- Analyze data to identify trends on emerging skills
- Answer questions:
  - Which programming language in demand?
  - What are the top database skills?
  - What are popular IDEs, platforms & web frames?
  - Key findings in demographics of the sector?
- Present finding on:
  - Current Technology Usage
  - Future Technology Trends
  - Demographics



# METHODOLOGY

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- Using job postings, training portals & surveys
- Collecting data using APIs & Web scrapping
- Data Wrangling
- Exploratory data analysis
- Statistical Analysis
- Data Visualization
  - Charts
  - Dashboards

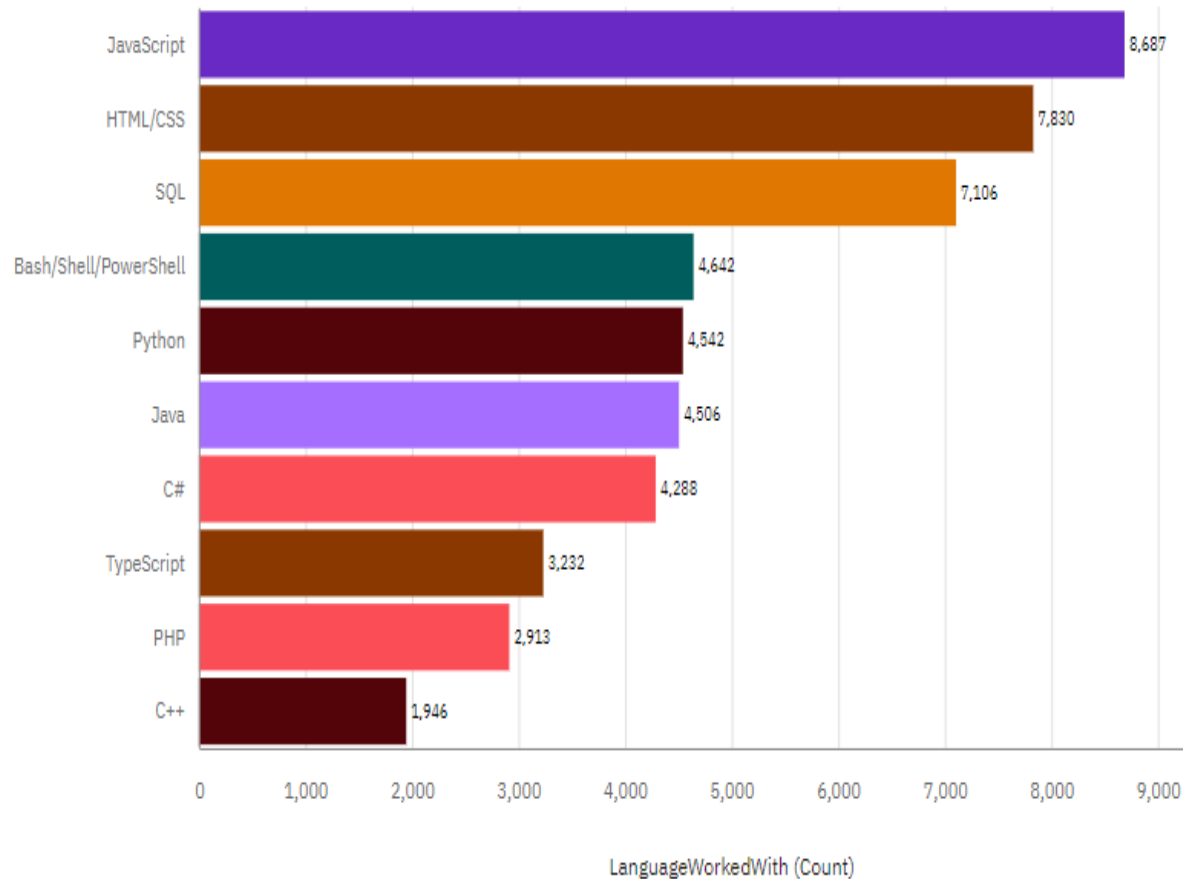
# RESULTS

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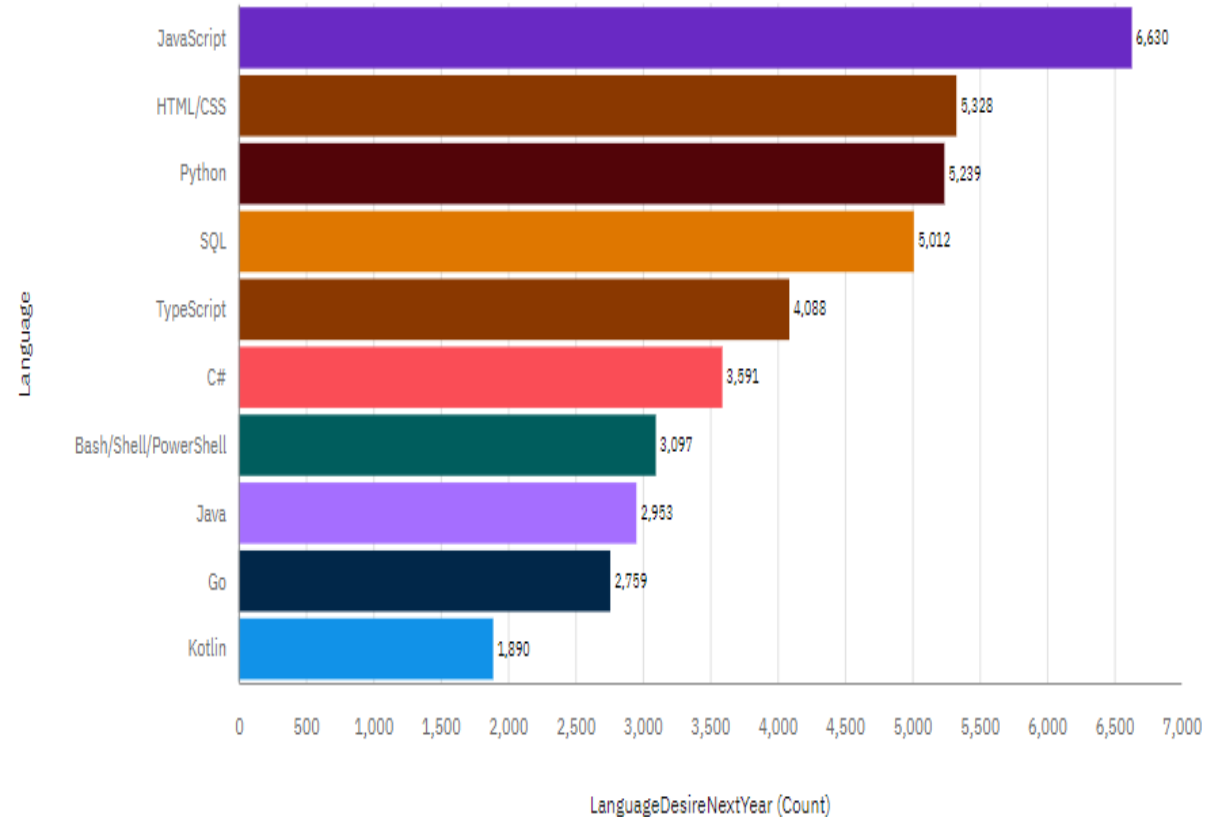
- Top programming languages in demand
- Top database skills in demand
- Popular IDEs
- Top Platform in demand
- Top Web frames in demand
- Demographic trends in sector

# PROGRAMMING LANGUAGE TRENDS

Top 10 Programming Languages for the Current Year



Top 10 Programming Languages for the Next Year



# PROGRAMMING LANGUAGE TRENDS

## FINDINGS

- Top programming languages in demand
- Growing Trends
- Declining Trends

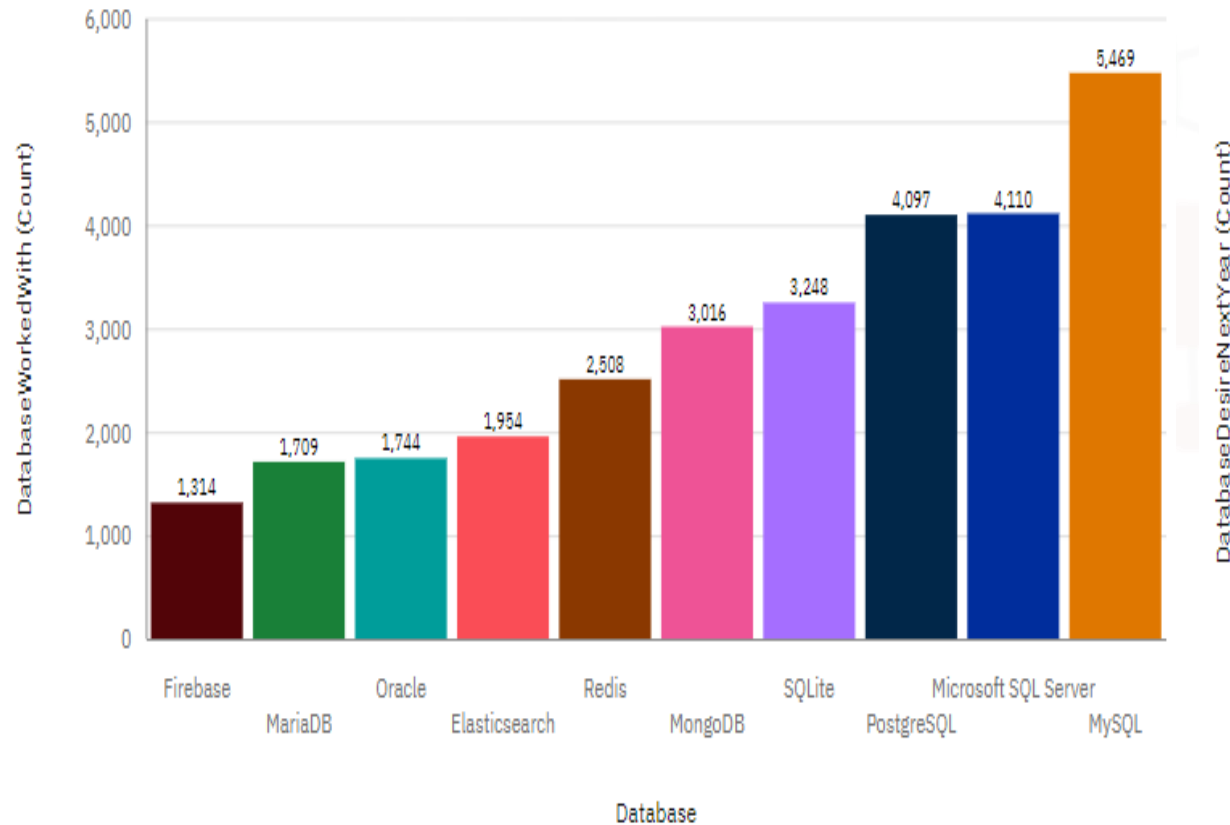
## IMPLICATIONS

- JavaScript, HTML/CSS, SQL & Python
- Python, Go, Kotlin & TypeScript
- Java, Bash/Shell/PowerShell

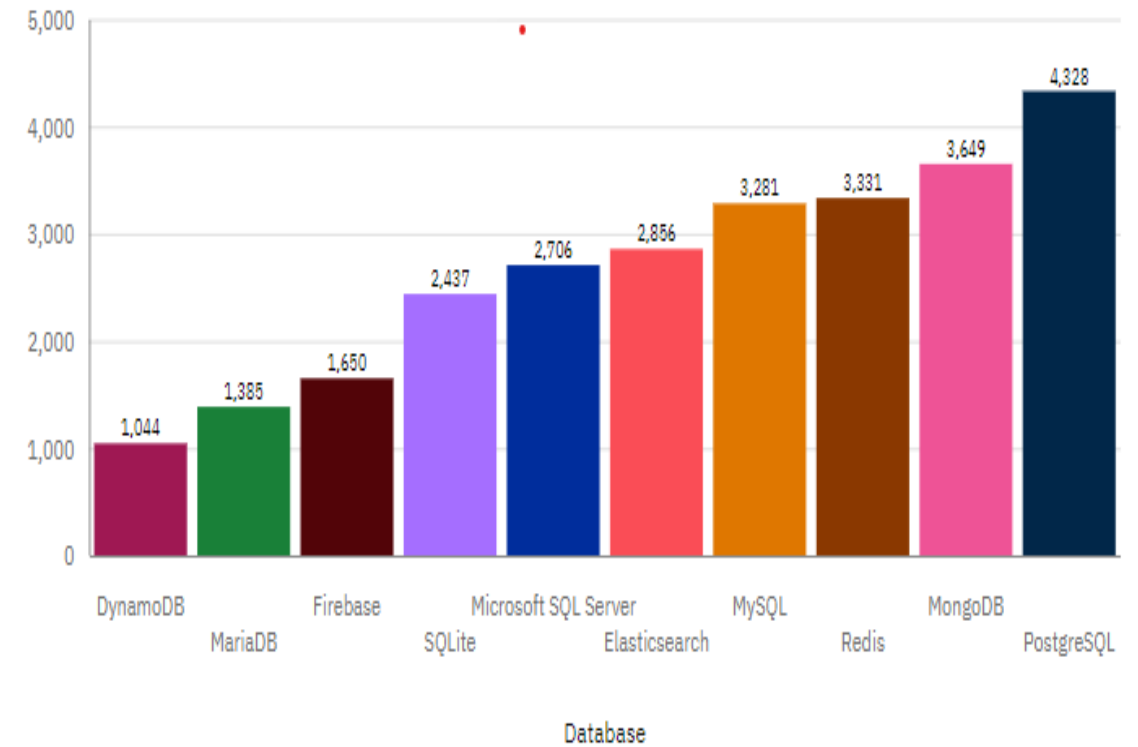


# DATABASE TRENDS

Top 10 Databases for the Current Year



Top 10 Databases for the Next Year



# DATABASE TRENDS

## FINDINGS

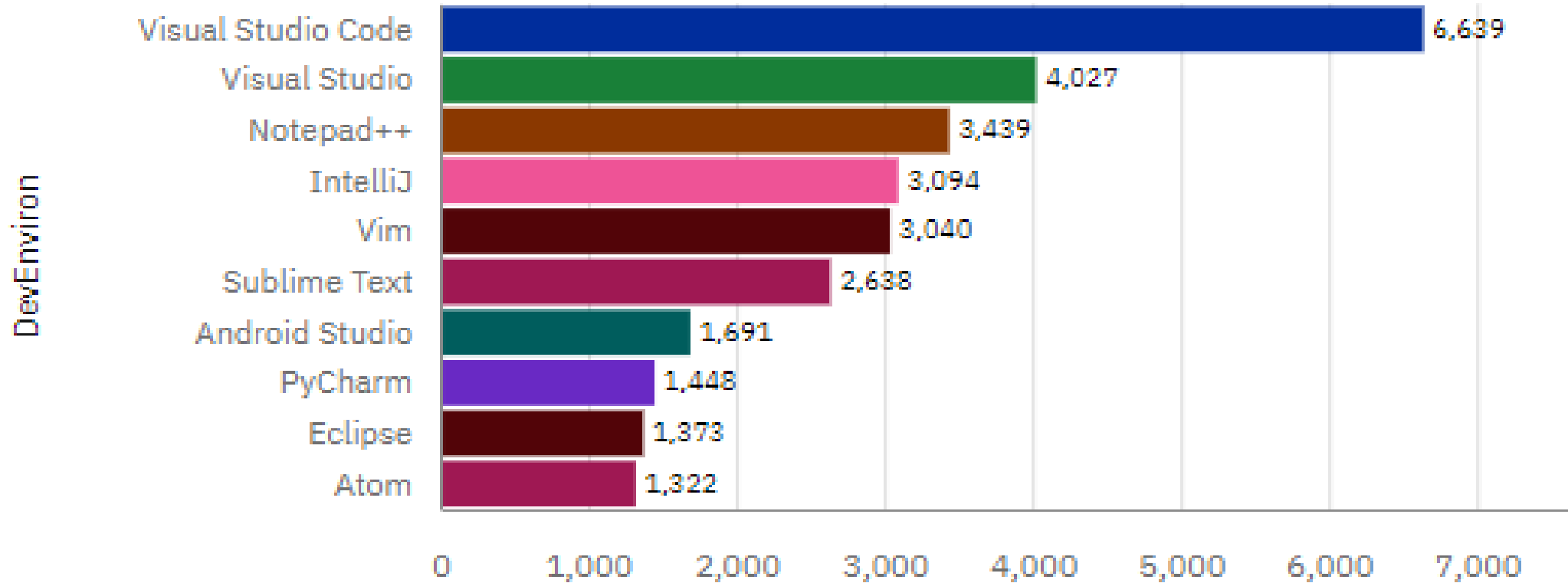
- Top database skills in demand
- Growing Trends
- Declining Trends

## IMPLICATIONS

- PostgreSQL, MongoDB, MySQL & Redis
- MongoDB, Redis, Elasticsearch, DynamoDB
- MicrosoftSQL Server, SQLite

# Top 10 IDEs

## Top 10 IDEs



# IDE TRENDS

## FINDINGS

- Top IDE in demand

## IMPLICATIONS

- Visual Studio Code, Visual Studio & Notepad++

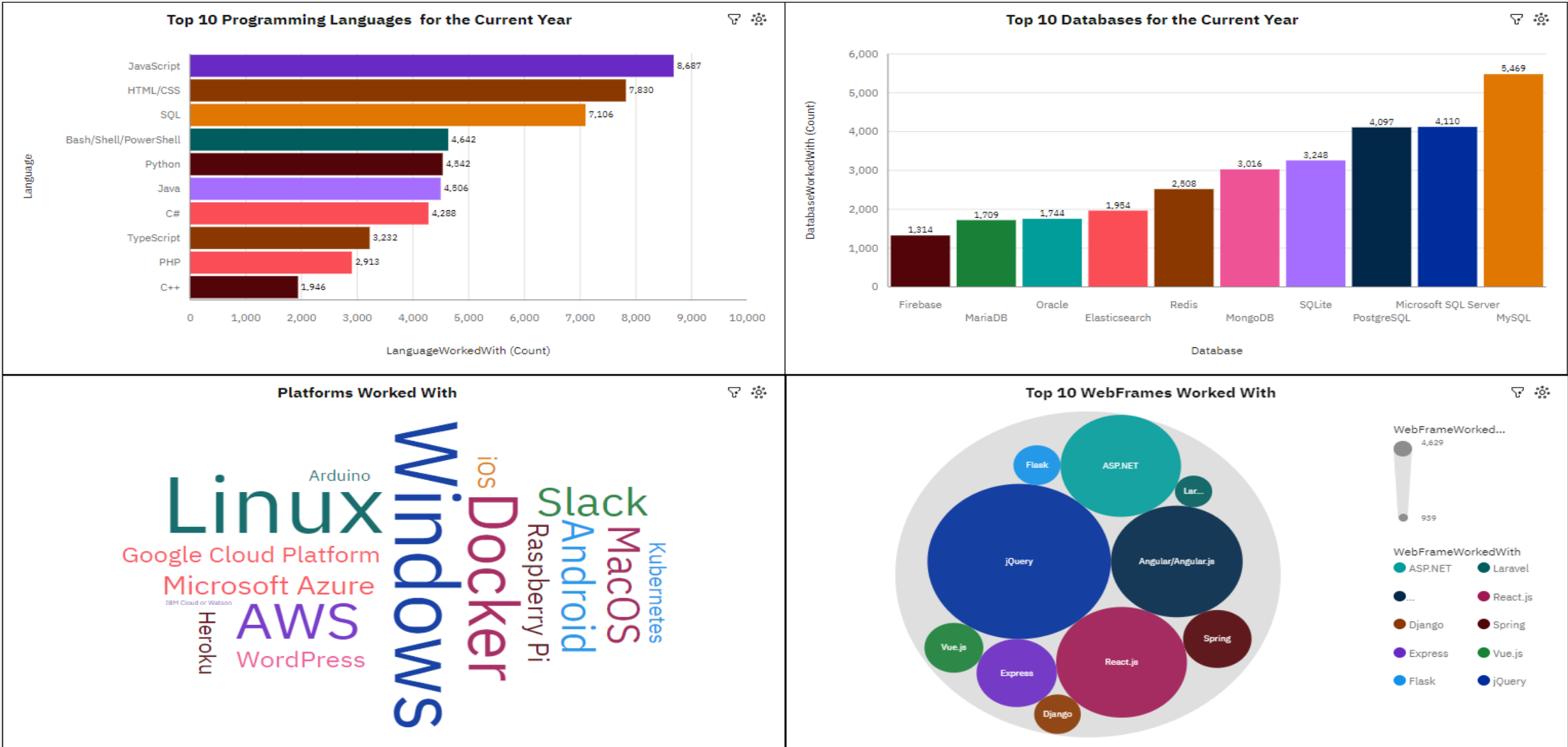
# DASHBOARDS

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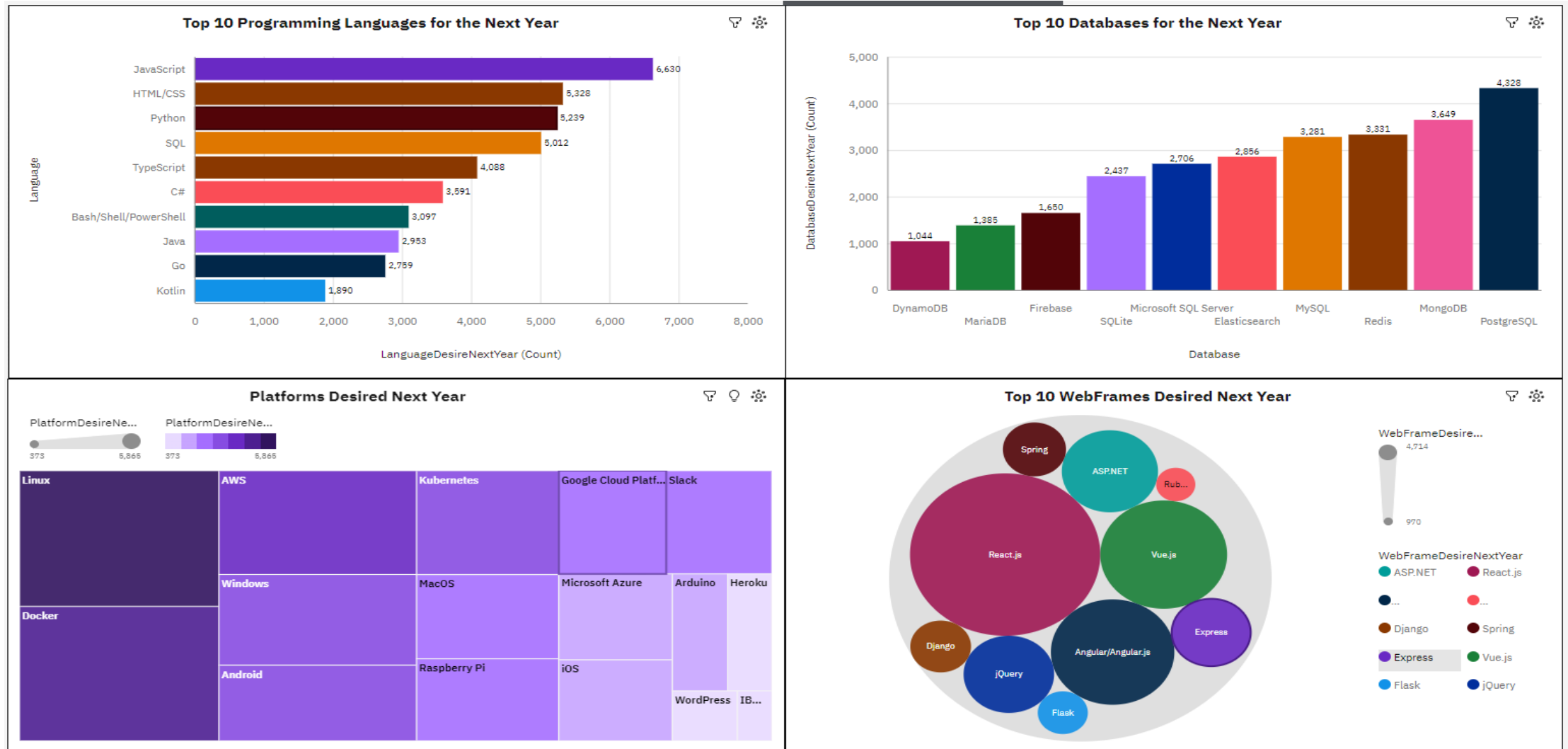


<https://github.com/adarida/Cognos-Final-Dashboard-PDF/blob/main/Final%20Dashboards.pdf>

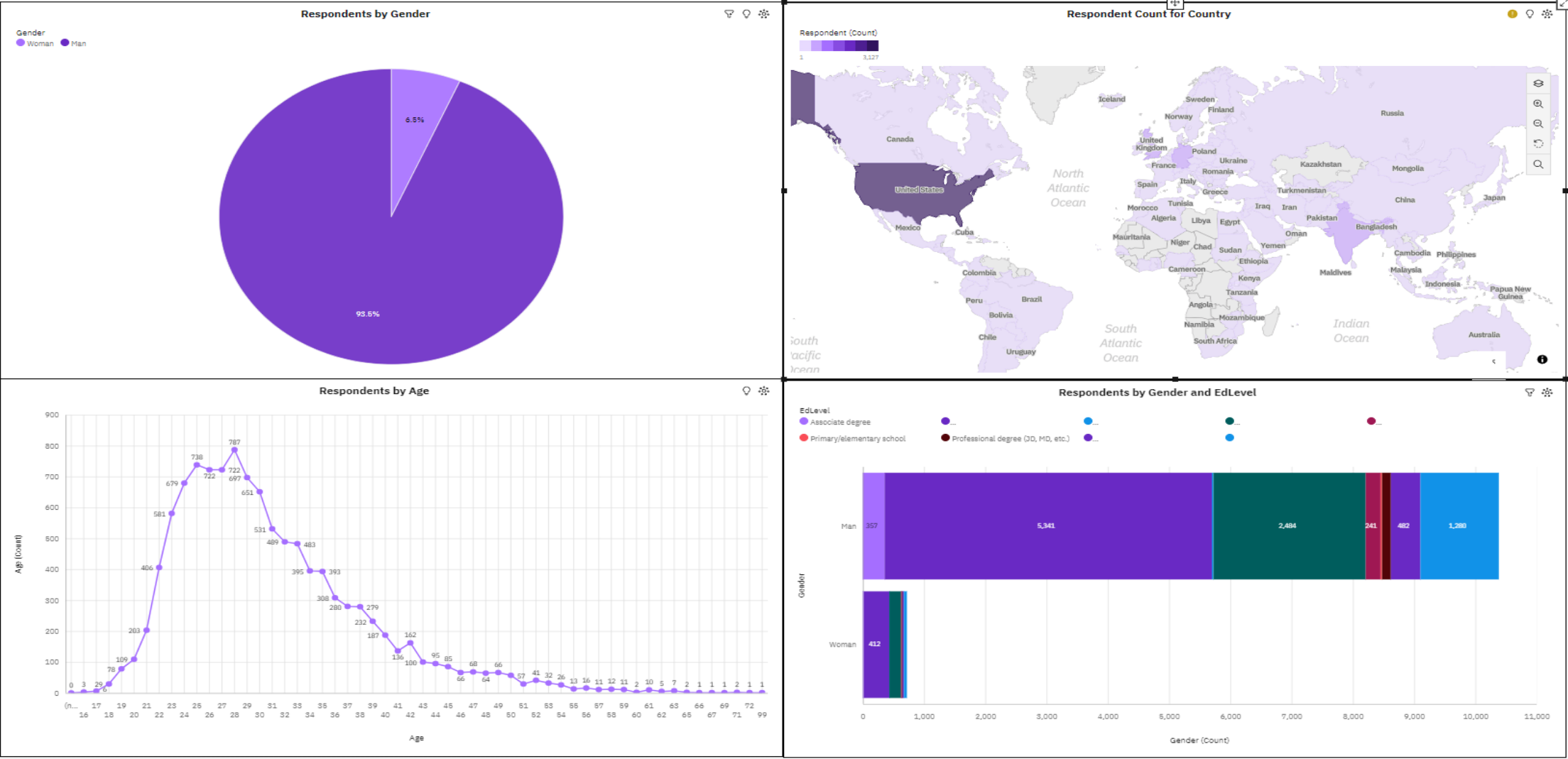
# CURRENT TECHNOLOGY USAGE



# FUTURE TECHNOLOGY TREND



# DEMOGRAPHICS





# DISCUSSION

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- How different are the current and the future technology trends?
- Which language/database/platform/web frame is the most popular in your opinion?
- Does education level important for tech workforce?
- How does average salary fluctuate depending on programming language?
- Why some locations have more job postings?



# OVERALL FINDINGS & IMPLICATIONS

## FINDINGS

- Most desired programming language
- Most desired database skill
- Popular IDEs
- Trendy platforms
- Top Web Frames
- Education level

## IMPLICATIONS

- JavaScript, HTML/CSS, SQL & Python
- PostgreSQL, Mongo DB, Redis, MySQL
- Visual Studio Code
- Linux, Docker, Windows, AWS & Android
- React.js, Vue.js, Angular/Angular.js
- Bachelor & Master Degree

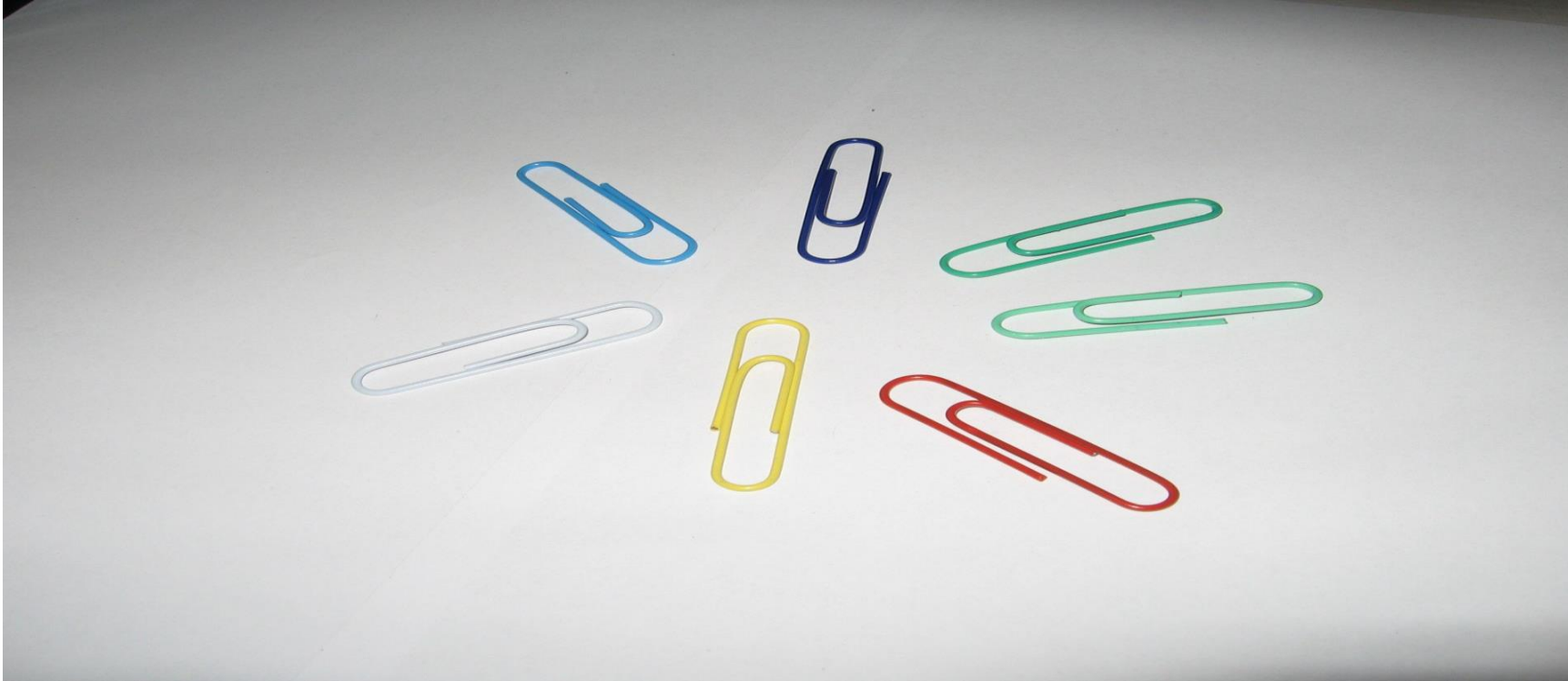
# CONCLUSION

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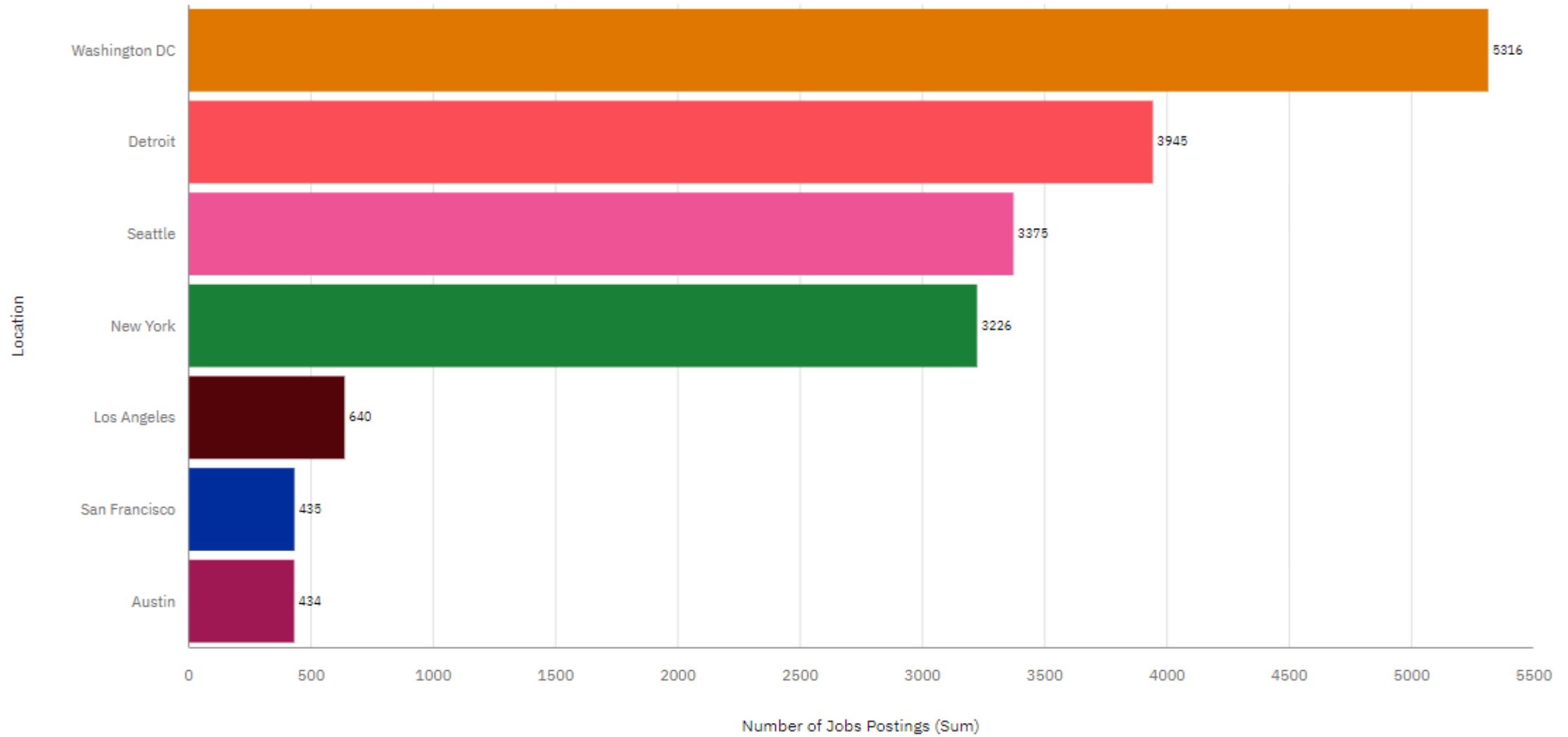
- Top programming languages in demand - **JavaScript, HTML/CSS, Python, SQL & TypeScript**
- Top database skills in demand - **PostgreSQL, MongoDB, Redis, MySQL,**
- Popular IDEs - **Visual Studio Code**
- Top Platforms in demand - **Linux, Docker, AWS, Windows & Android**
- Top Web frames in demand - **React.js, Angular/Angular.js, Vue.js, ASP.NET & Express**
- Demographic trends in sector - **Majority in sector has Bachelor/Master degrees**

# APPENDIX

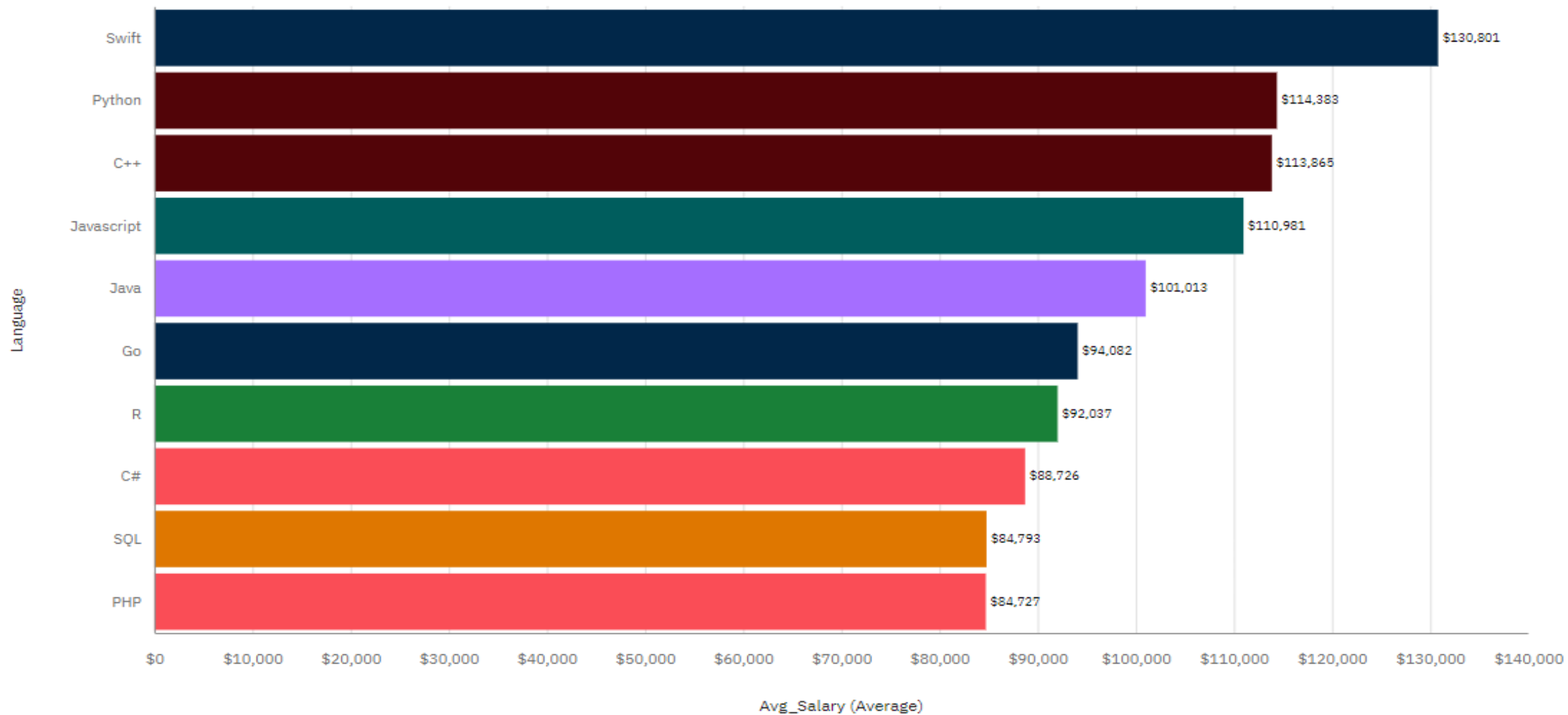
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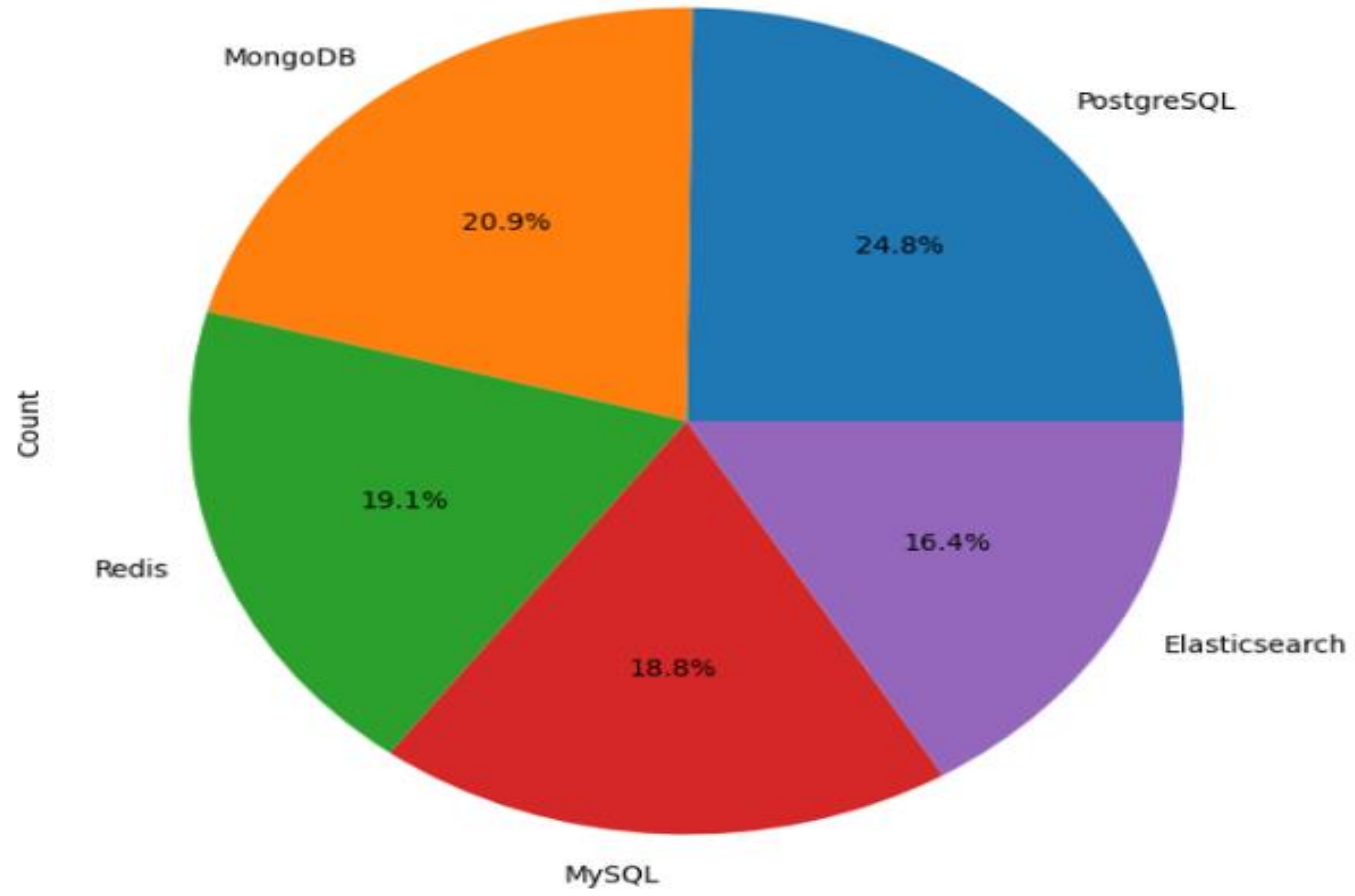
## Number of Jobs Postings by Location



## Average Salary by Top 10 Languages



Top 5 Databases Desired to Learn



## REFERENCES

