



Tech job trend analysis

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OUTLINE



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

EXECUTIVE SUMMARY



- Many new grads and self-learners interested in tech careers are constantly wondering which technology should they learn.
- It is indeed crucial to know which language, database or web framework to investigate.
 - This can be time saving for individual contributors
 - Companies can also anticipate internal knowledge training strategy.
- Investigating in professional survey data can give us a clear vision about this subject.
- The Dataset used in this project is a subset of Stack Overflow data with a demographics csv and a tech survey csv.
- We provide a dashboard to offer an intuitive insight for technology trend opinion.

INTRODUCTION



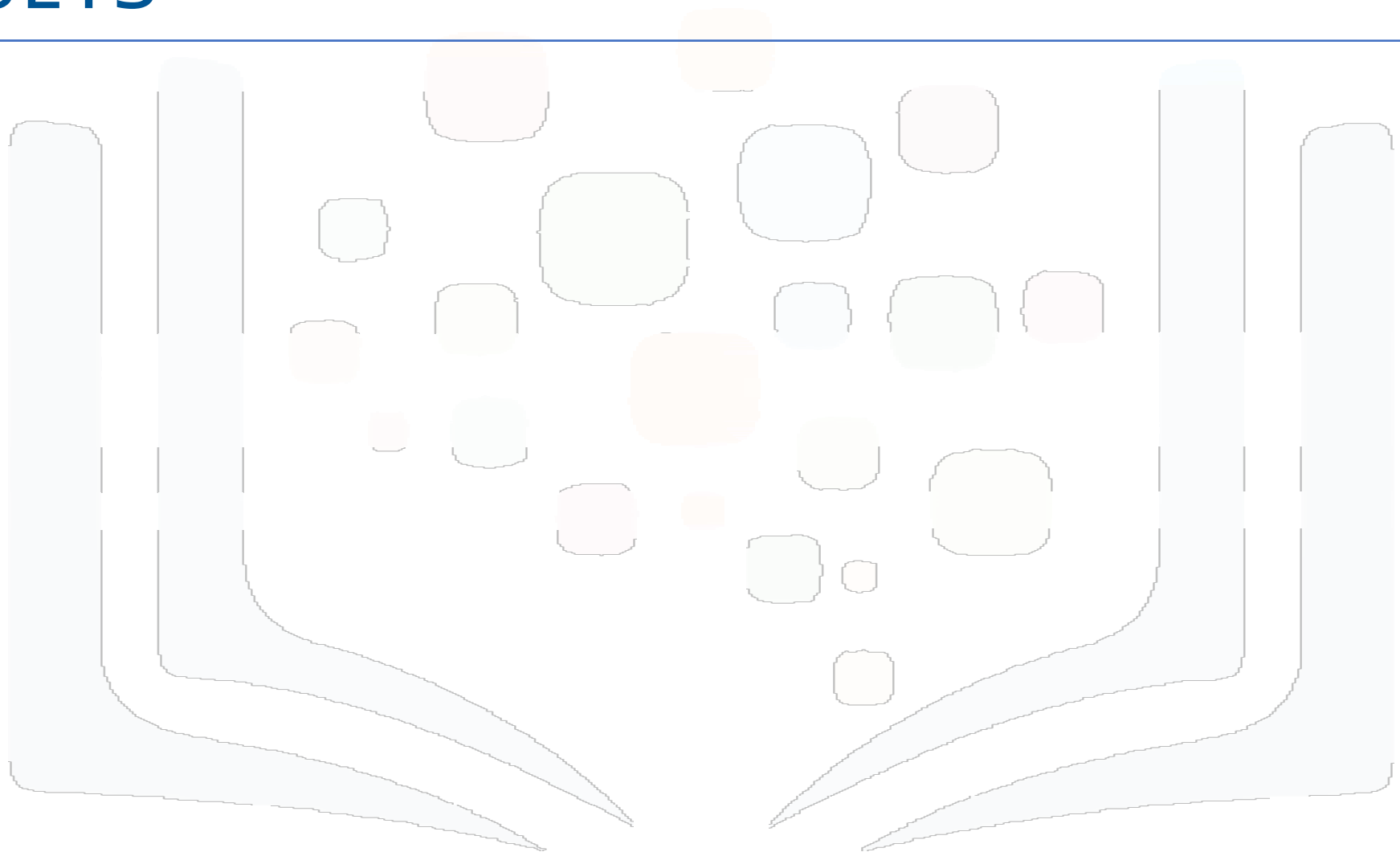
- This presentation will help identify the gap between current and future skill requirements in the global IT sector.
- With a dashboard, companies and individual contributors can keep pace with the changing technologies and anticipate engagement to be more competitive.
- All conclusions are based on survey data analysis.

METHODOLOGY

- Both csv are from stack overflow.
- Botsh csv are clean so there is no data cleansing step.
- IBM Cognos Dashboard Embedded platform is used to create dashboards in this analysis



RESULTS



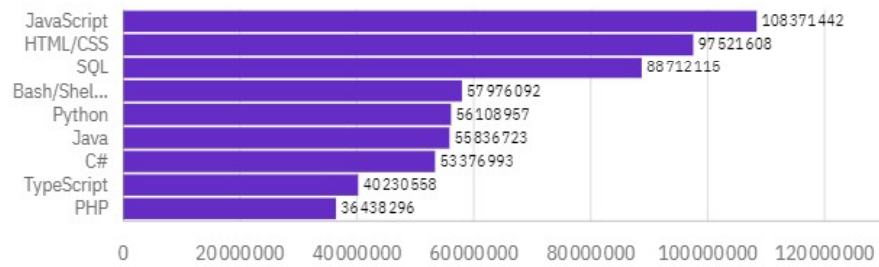
Developer

SKILLS NETWORK

PROGRAMMING LANGUAGE TRENDS

Current Year

Top 10 LanguageWorkedWith

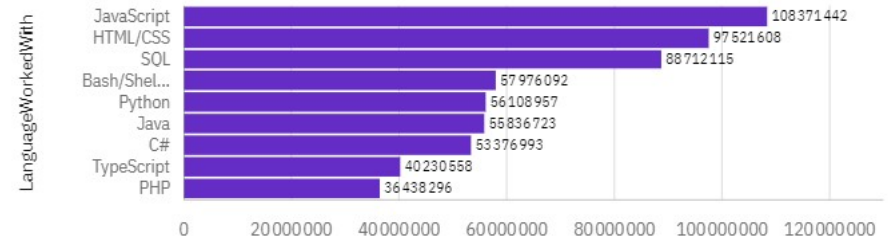


Respondent (Somme)

Developer

Next Year

Top 10 LanguageWorkedWith



Respondent (Somme)

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PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

Python's popularity is progressing
PHP is declining
Javascript and sql stays top 3 popular languages

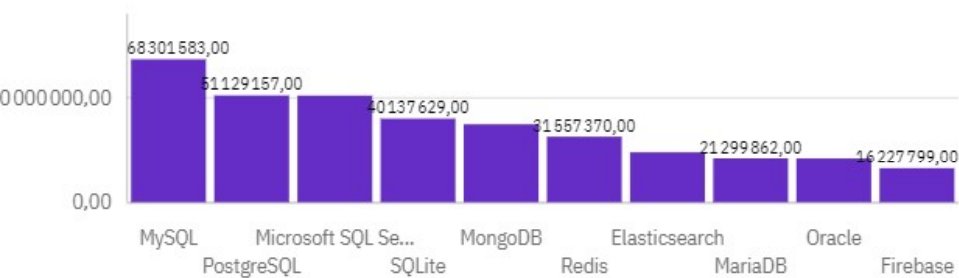
Implications

- As a data analyst, learning Python, sql is crucial.
- Front-end technology needs is slightly in decline.
- Investing in PHP is not a good idea for developers.

DATABASE TRENDS

Current Year

DatabaseWorkedWith

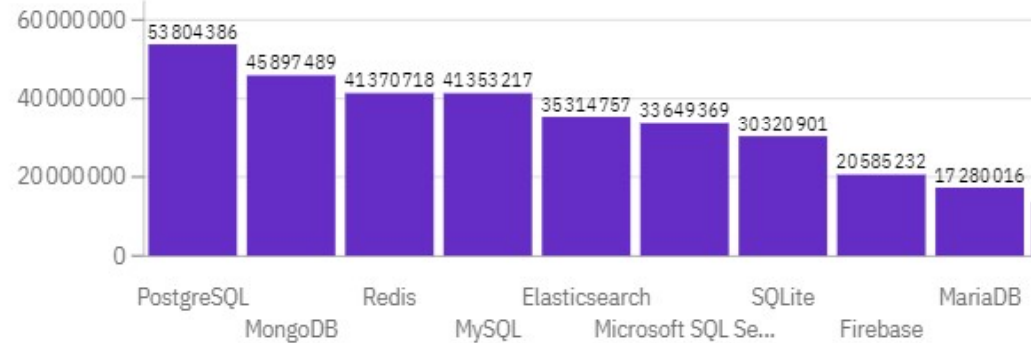


DatabaseWorkedWith

Next Year

Top 10 DatabaseDesireNextYear

Respondent (Somme)



DatabaseDesireNextYear

Developer

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DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

Postgresql replaces Mysql at the podium.

Current top 3 popular database are relational database whereas for future the 2/3 are non-relational database.

Oracle is no more in the top 10 popular database system.

Implications

- We notice an emphasis on open-source relational database tool.
- Mastering at least one non-relational database is crucial for future data opportunities.
- Investing too much time on Oracle is not a good idea for future evolution.

DASHBOARD

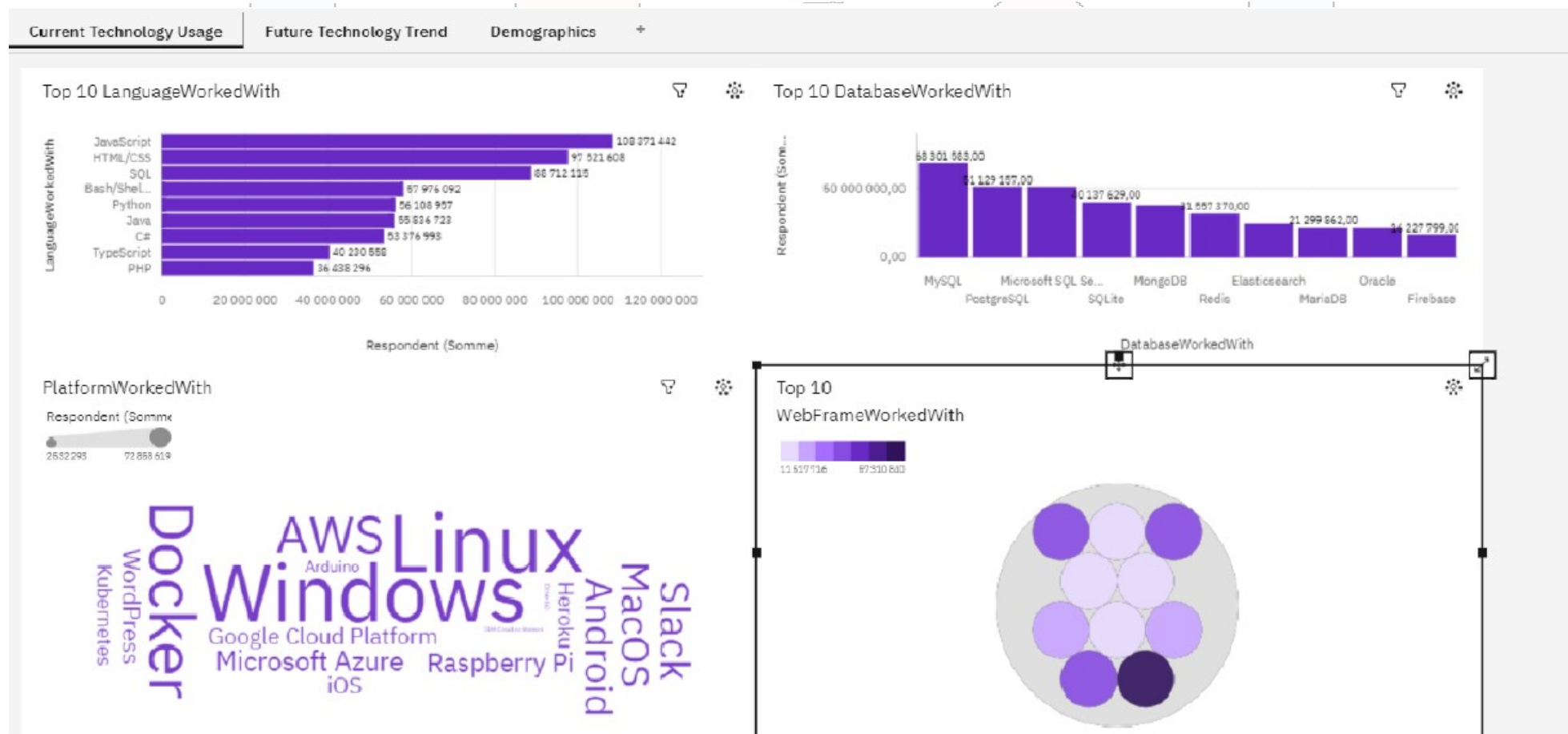
The background features a collection of abstract, rounded rectangular shapes in various colors including light blue, light green, light orange, and light pink. On the left side, there are two overlapping orange speech bubble shapes. In the center, a URL is displayed in blue text. At the bottom, the words 'Developer' and 'SKILLS NETWORK' are written in a dark blue, sans-serif font.

https://github.com/Yjzda/da_final/blob/main/ibm_data_analyst_dashboard.pdf

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DASHBOARD TAB 1



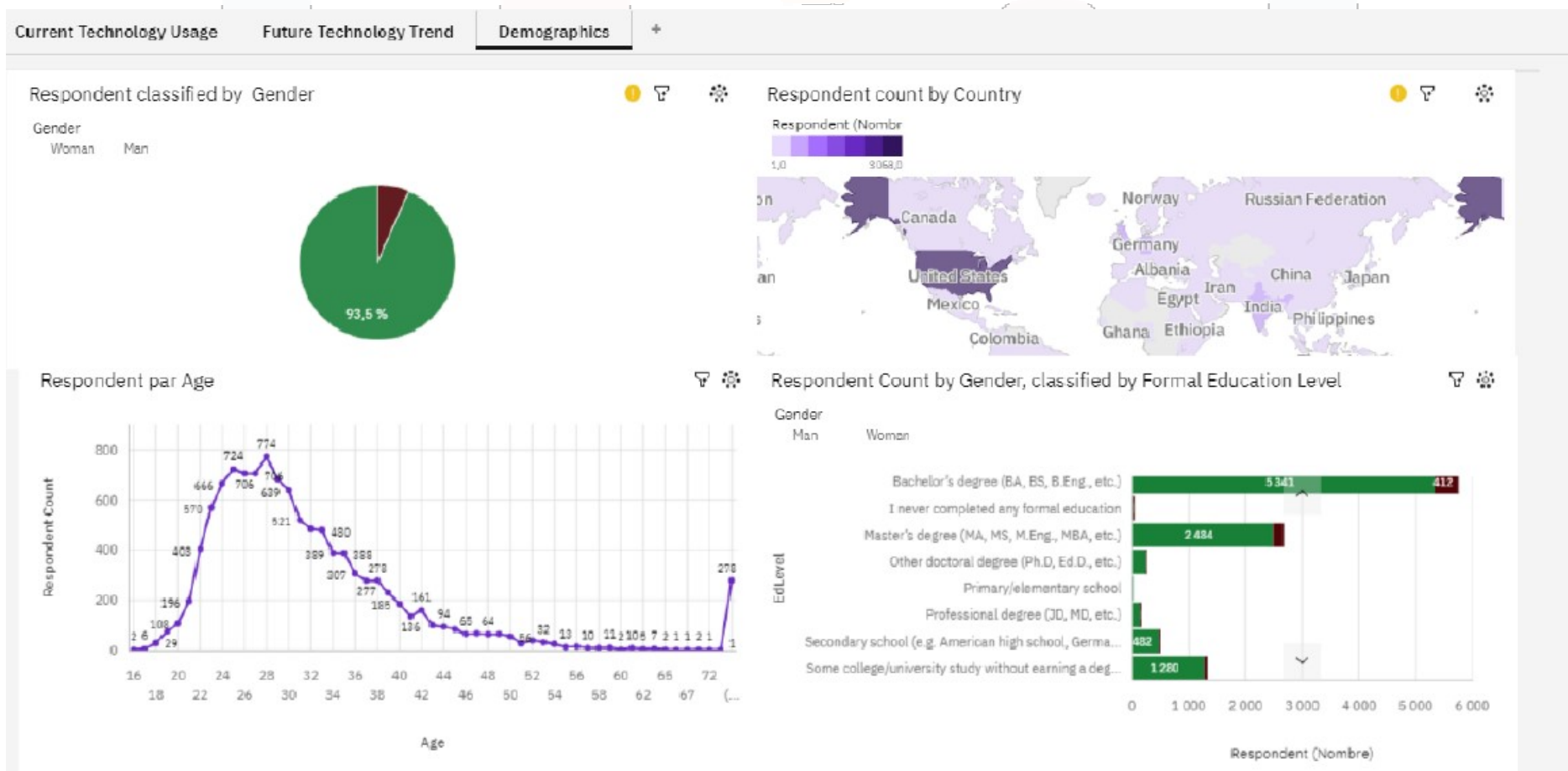
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DASHBOARD TAB 3



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DISCUSSION

- 
- We should identify the reason why mysql's popularity is drastically falling.
 - We should also understand the reason why non-relational database is gaining so much attention.

OVERALL FINDINGS & IMPLICATIONS

Findings

Programming languages:

- Python and Javascript continue to be the most wanted skills.

Database:

- Postgresql, MongoDB, Redis and ElasticSearch are gaining attention.

Platform:

- Linux, AWS, Docker remain the most popular.
- Windows and Slack are falling from the podium.

Web Framework:

- Vue.js is gaining position but React.js remain very important.

Implications

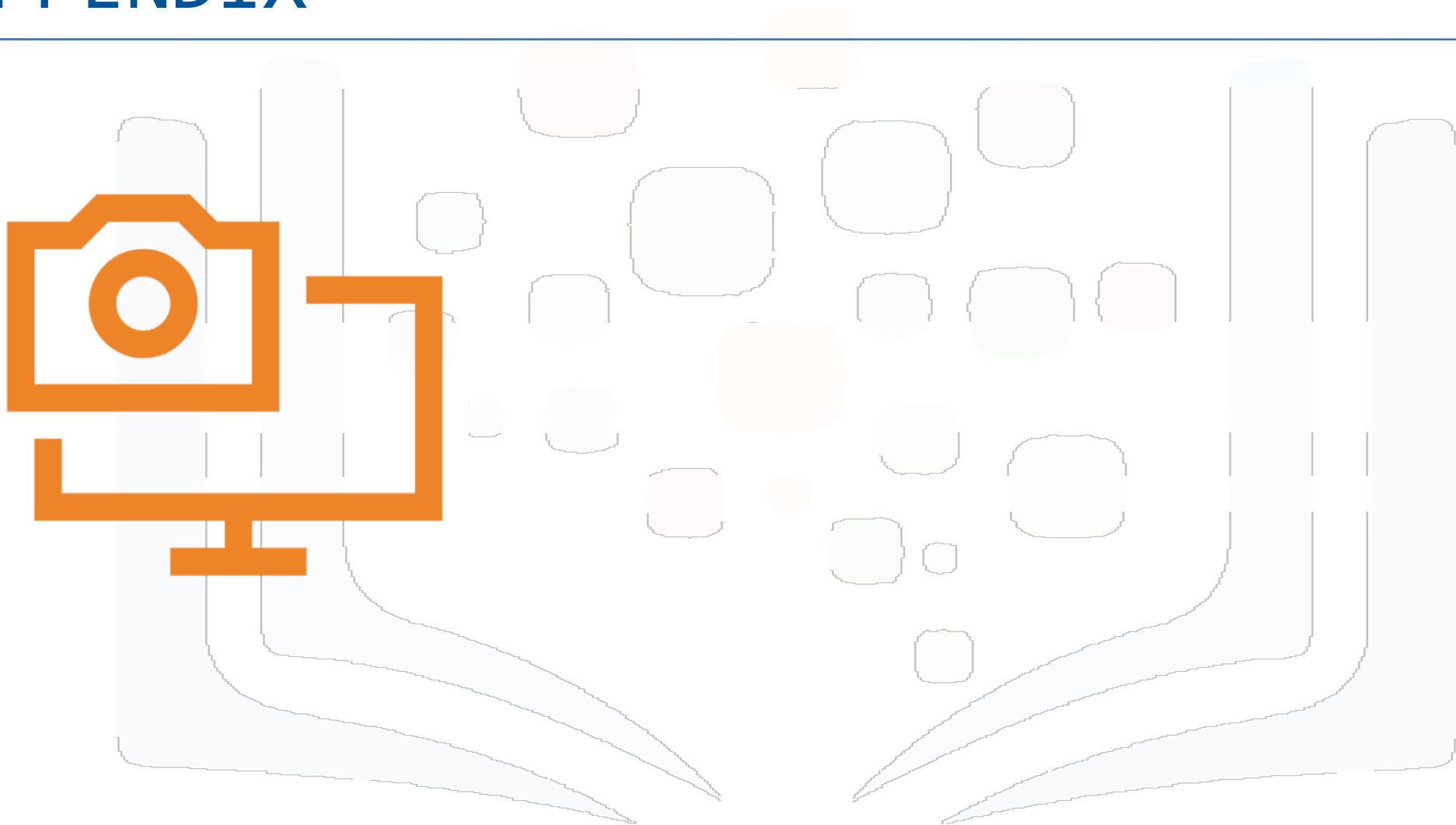
- Continue to staff and gain knowledge on javascript and python.
- No-SQL and open-source sql techniques should be more focused on.
- Cloud, big data technics should continue to be investigated.
- Web Frameworks remain smooth as trend.

CONCLUSION



- Javascript remain the most wanted front-end technics, whereas for back-end and data domain python should be more staffed.
- Non-relational database skills should be emphasized.
- Linux and cloud platform should are gaining popularity.
- Compared to other technics, web framwork trend stay nearly the same.

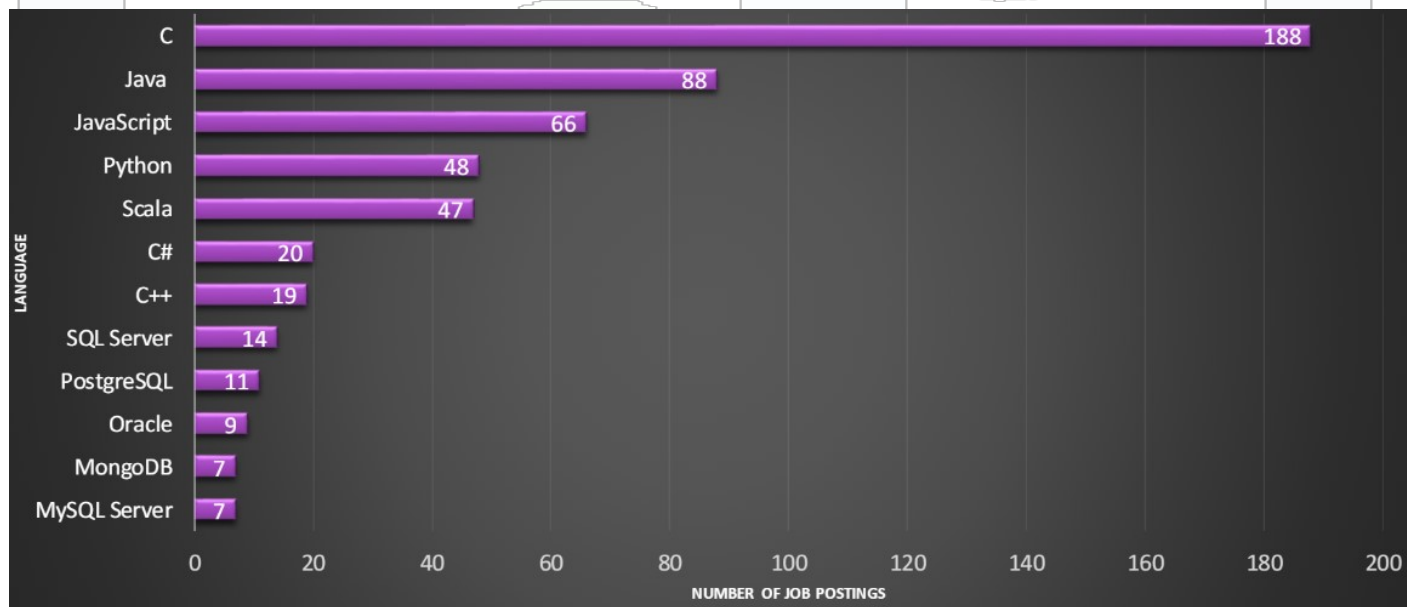
APPENDIX



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JOB POSTINGS



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POPULAR LANGUAGES

