IBM Data Analyst Professional Certificate

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OUTLINE

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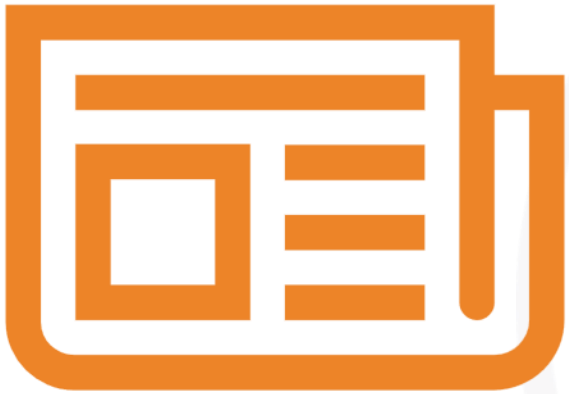
EXECUTIVE SUMMARY

- Developers frequently use CockroachDB, Couchbase, and DuckDB, along with platforms like Cloudflare and Digital Ocean.
- jQuery and React are the most common web frameworks.
- Cloud platforms dominate current usage.
- Distributed databases are widely adopted.
- Interest is shifting toward Firebase, Supabase, and MongoDB for future database work.
- React and full-stack JavaScript frameworks are top choices for future development.
- Most respondents are aged 18–34 with bachelor's or master's degrees.
- These trends suggest aligning training and hiring with modern, cloud-native technologies.

INTRODUCTION

- The project analyzes developer preferences across databases, platforms, and web frameworks.
- It compares tools developers currently use with those they aspire to work with.
- The data was collected from a global pool of respondents with diverse backgrounds.
- Demographic insights reveal trends based on age, education, and geography.
- Most respondents are aged 18–34 with bachelor's or master's degrees.

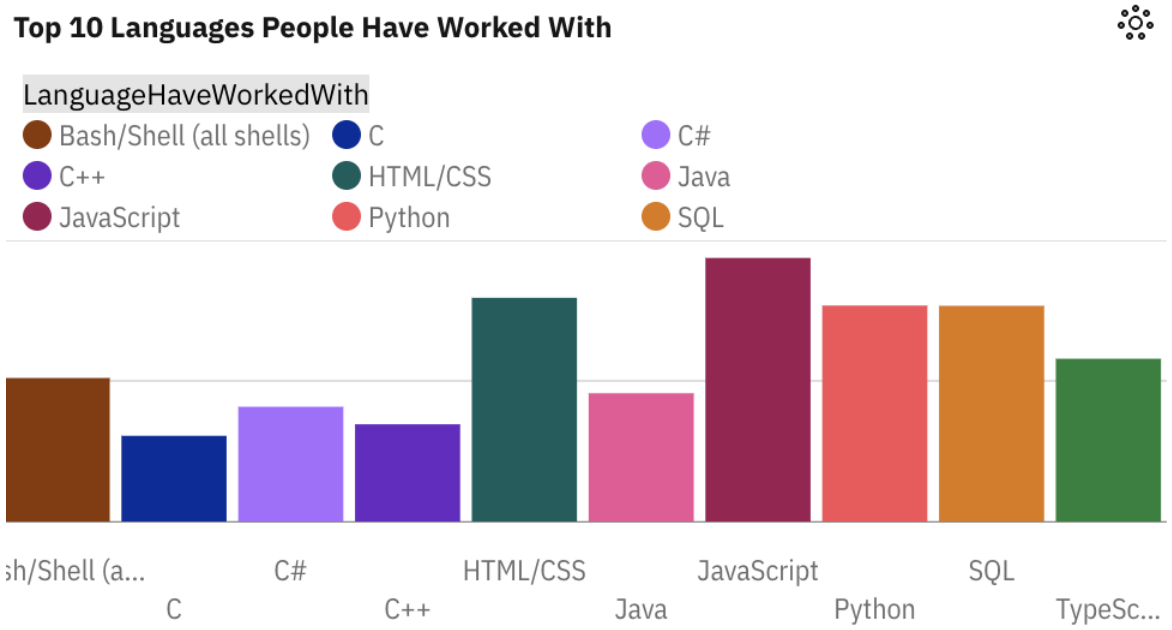
METHODOLOGY



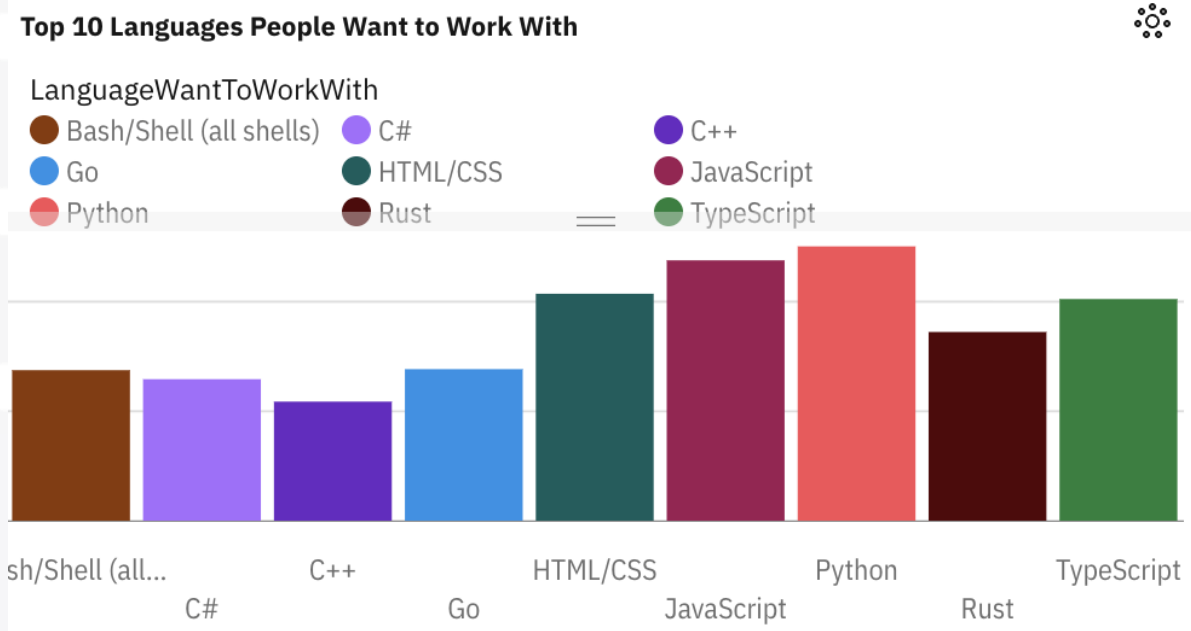
- Data was collected from a global developer survey focused on technology usage and preferences.
- Responses were analyzed to compare current experience with future interest across databases, platforms, and frameworks.
- Visualizations were created using bar charts and dashboards to highlight key trends.
- Demographic data was used to contextualize technical preferences.
- Age and education levels were cross-referenced with technology choices.
- Geographic distribution helped identify regional patterns in adoption and interest.

PROGRAMMING LANGUAGE TRENDS

Current Year



Next Year



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PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings:

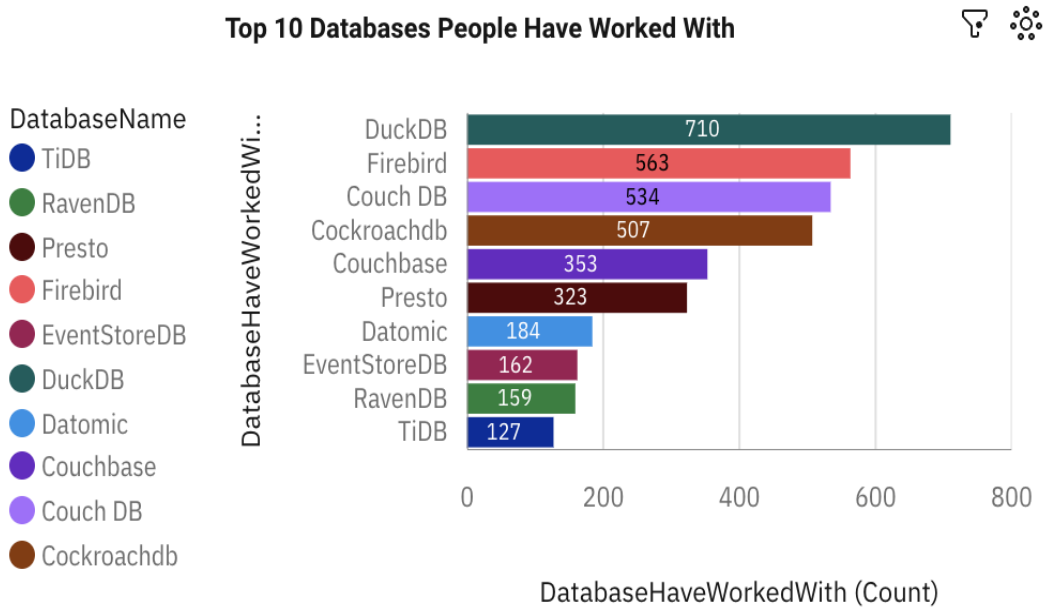
- Javascript, HTML/CSS, and Python are highest used programming languages.
- Python is the most wanted language to work with next year.
- Javascript still ranks 2nd highest for languages people want to work with next year

Implications:

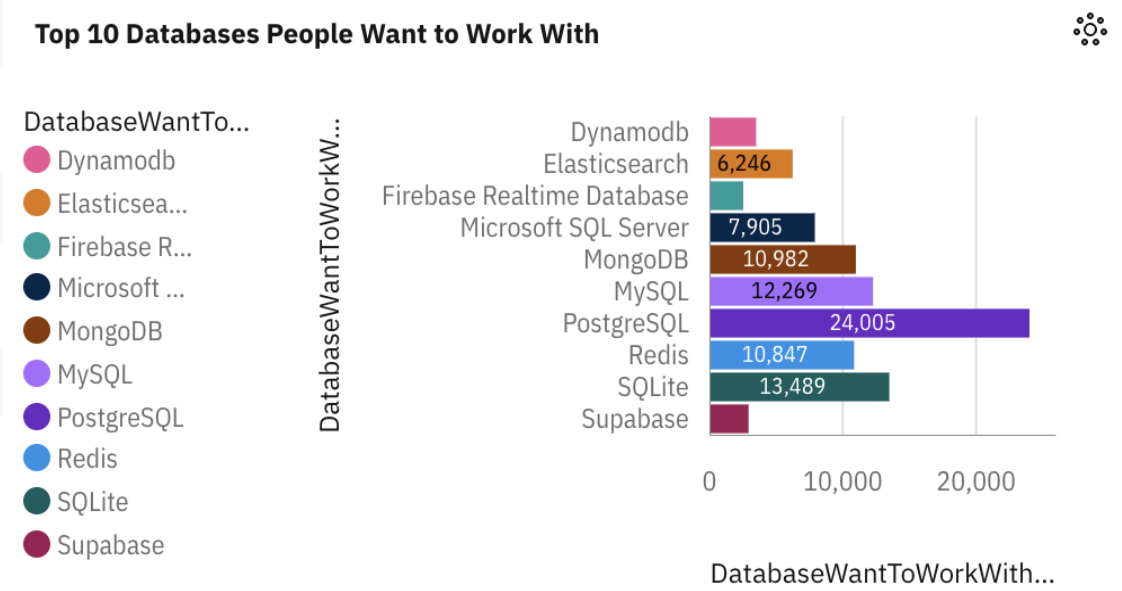
- People are more likely to purchase online courses related to Python than any other language.
- Applications catering to Python are going to be more likely to be utilized by future developers.
- Javascript is still incredibly popular and will continue to have a relevant place in software development.

DATABASE TRENDS

Current Year



Next Year



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DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings:

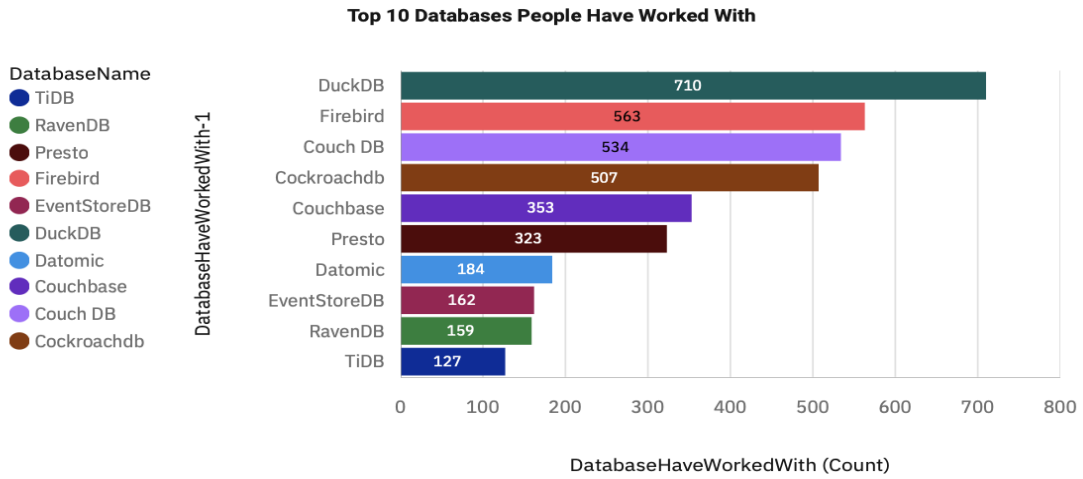
- DuckDB is the most popular database to work with this year.
- PostgreSQL is most wanted language for people to work for next year.
- SQLite is an emerging language that is growing in popularity.

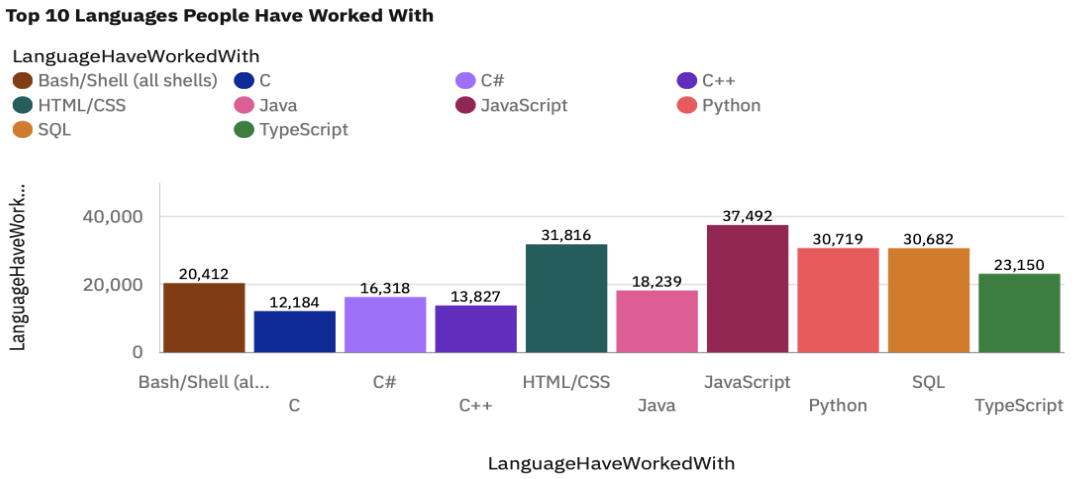
Implications:

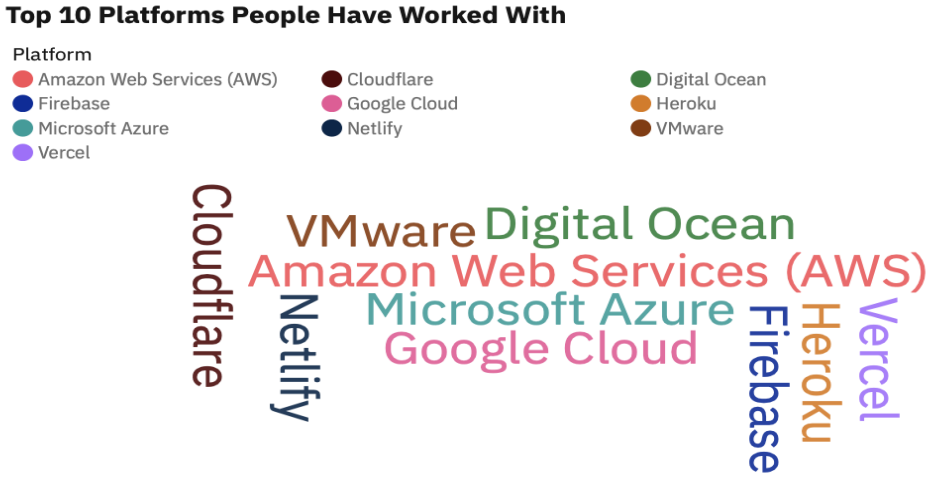
- SQL's varieties are growing and are becoming an increasingly popular language in the corporate world.
- Increased industry adoption of lightweight and efficient databases
- An increasing shift toward open-source and scalable solutions

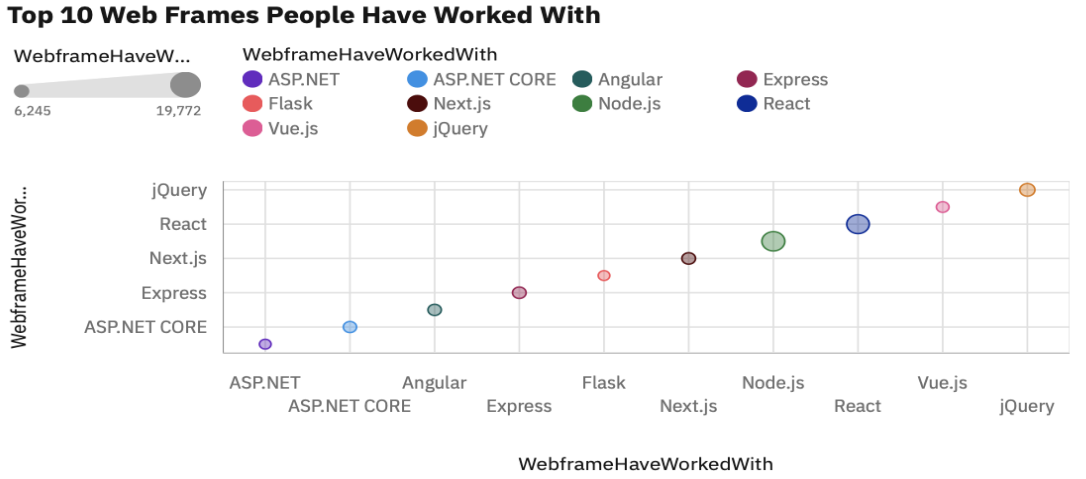
DASHBOARD

DASHBOARD TAB 1



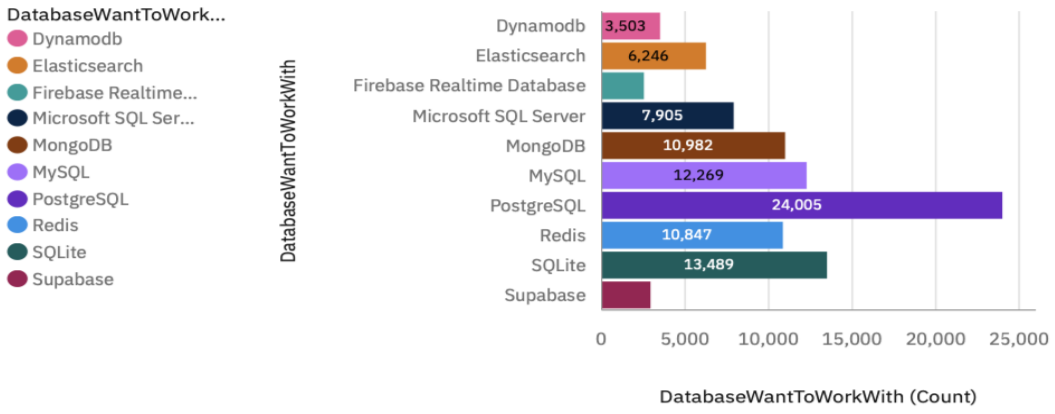




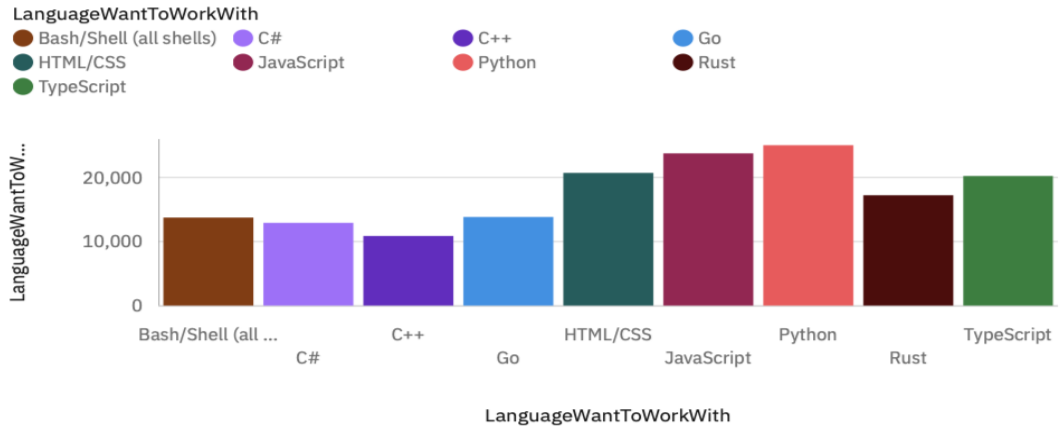


DASHBOARD TAB 2

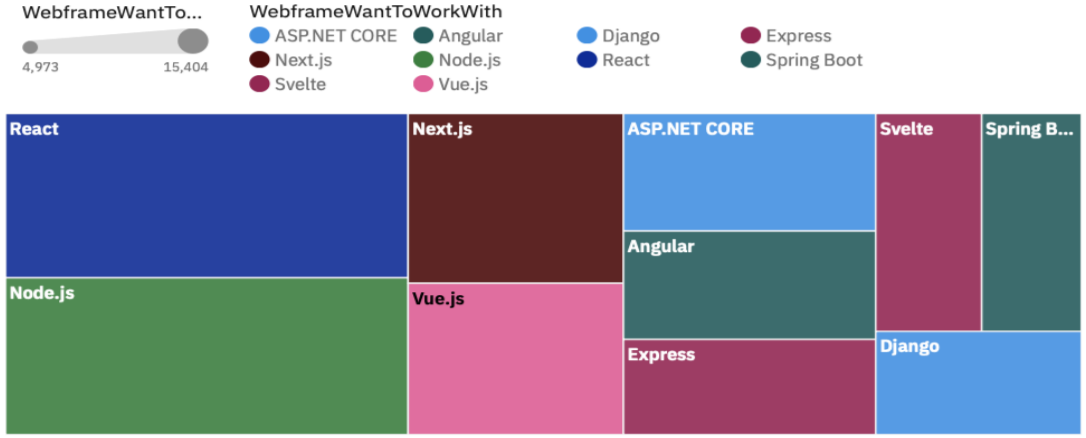
Top 10 Databases People Want to Work With



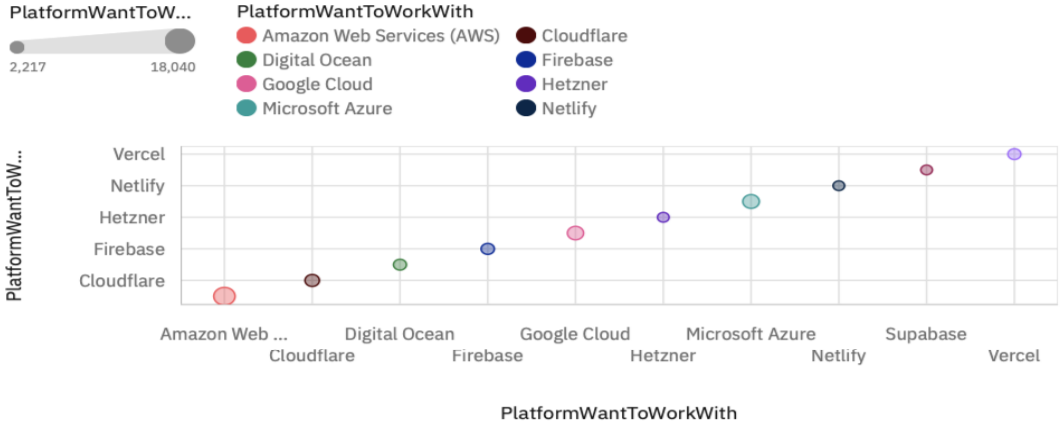
Top 10 Languages People Want to Work With



Top 10 WebFrames People Want to Work With



Top 10 Platforms People Want to Work With



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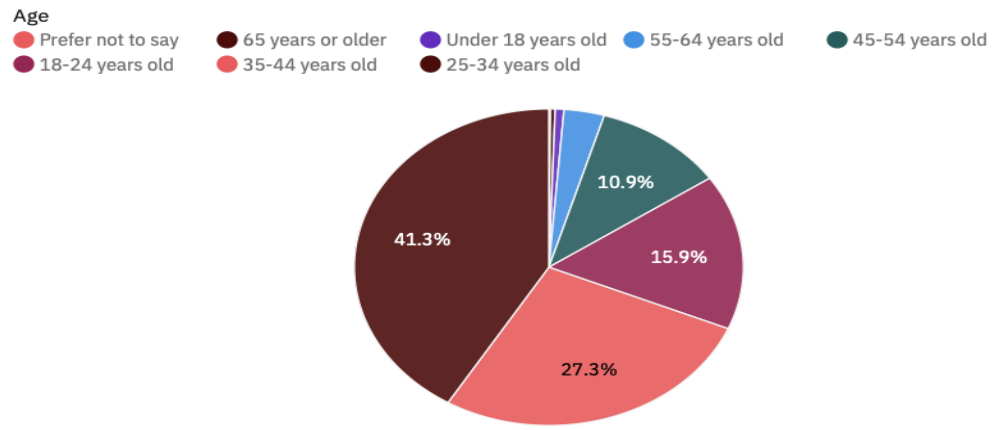
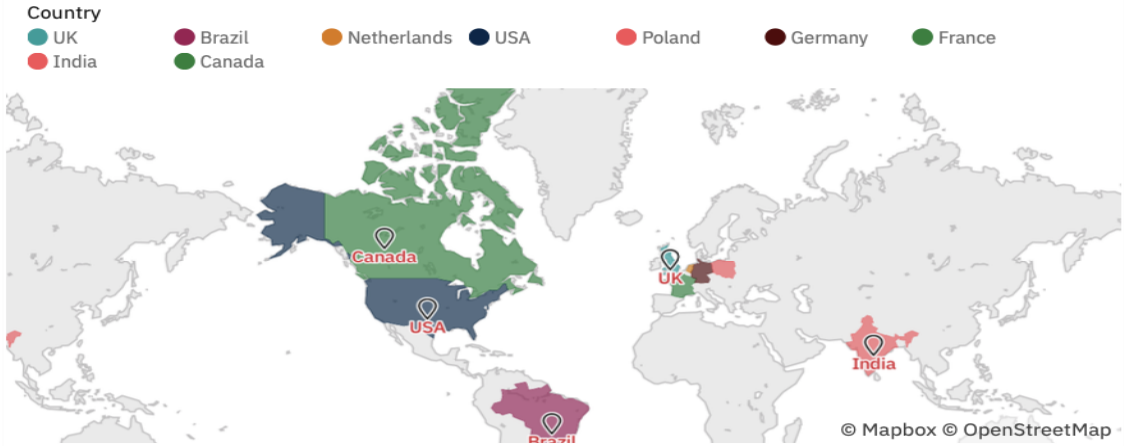
DASHBOARD TAB 3

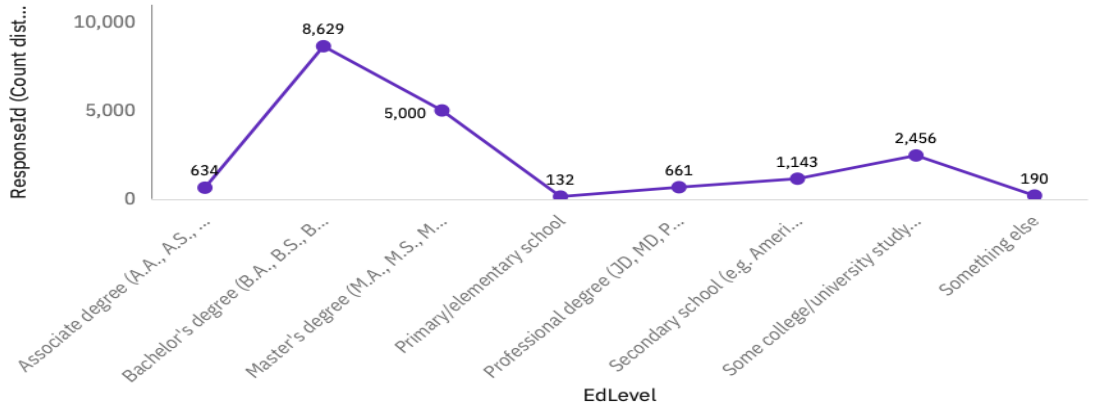
Respondent distribution by Age



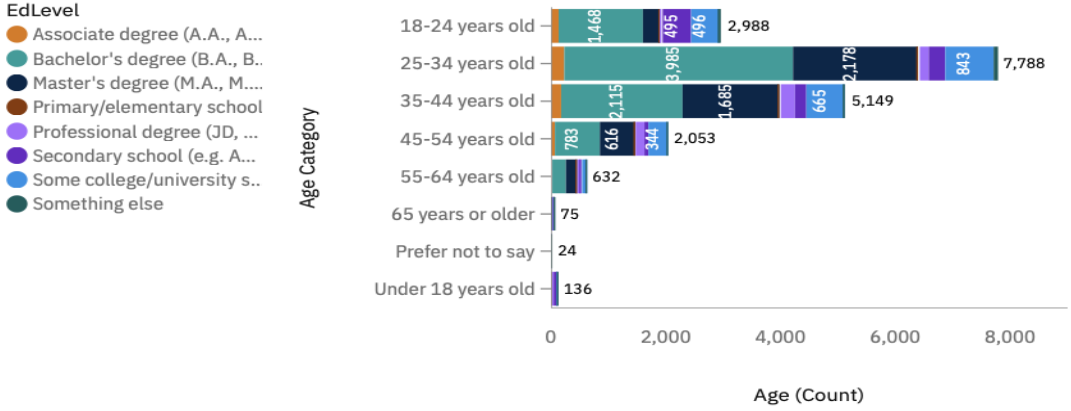
Top 10 Countries per Response



Respondent distribution by Formal Education Level.



Respondent Count by Age, classified by Education Level



DISCUSSION

- Any thoughts?

OVERALL FINDINGS & IMPLICATIONS

Findings:

- Developers are increasingly becoming younger.
- Bachelor's degrees are the most common for developers in the proffessional field.
- The USA continues to dominate in # of developers.

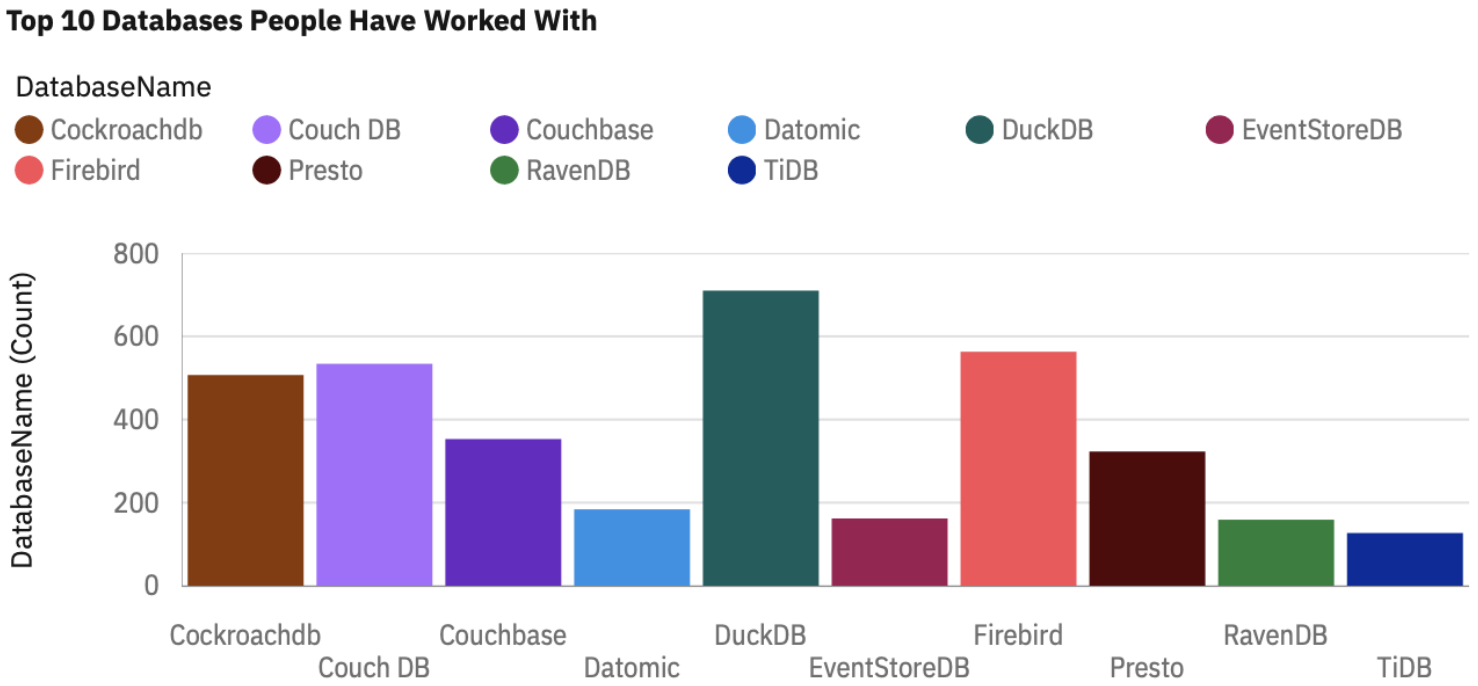
Implications:

- The tech industry is attracting talent earlier.
- Formal education still holds value in tech careers.
- The USA remains a global tech leader.

CONCLUSION

- The developer community is becoming younger, signaling early engagement with technology and coding education.
- Bachelor’s degrees remain the most common pathway into professional development roles, showing the continued importance of formal education.
- The United States maintains its position as the leading hub for developers worldwide, emphasizing its strong tech ecosystem.
- The evolving developer landscape highlights the need for organizations to invest in continuous learning and skill development to stay competitive.

APPENDIX


Top 10 Databases People Have Worked With
DatabaseName
Cockroachdb
Couch DB
Couchbase
Datomic
DuckDB
EventStoreDB
Firebird
Presto
RavenDB
TiDB
DatabaseName (Count)
800
600
400
200
0
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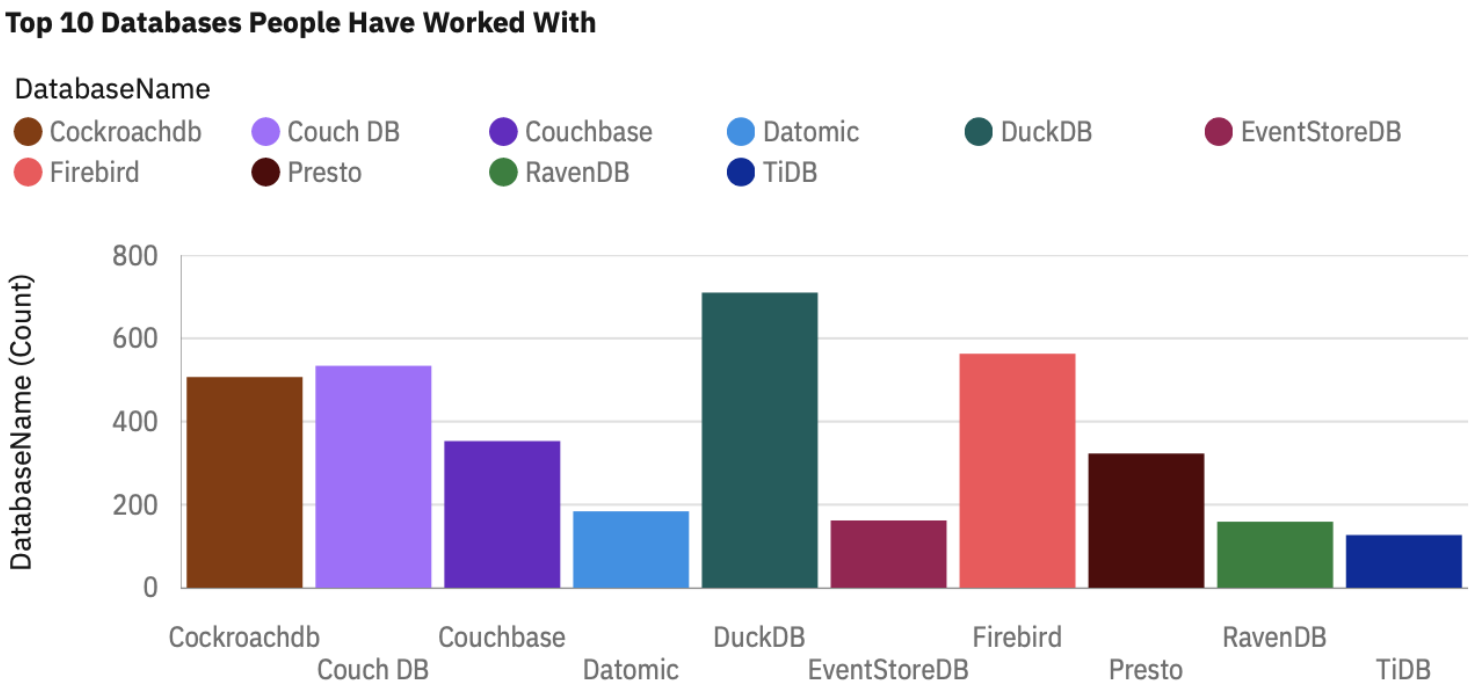
Couch DB
Couchbase
Datomic
DuckDB
EventStoreDB
Firebird
Presto
RavenDB
TiDB

APPENDIX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0
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DuckDB
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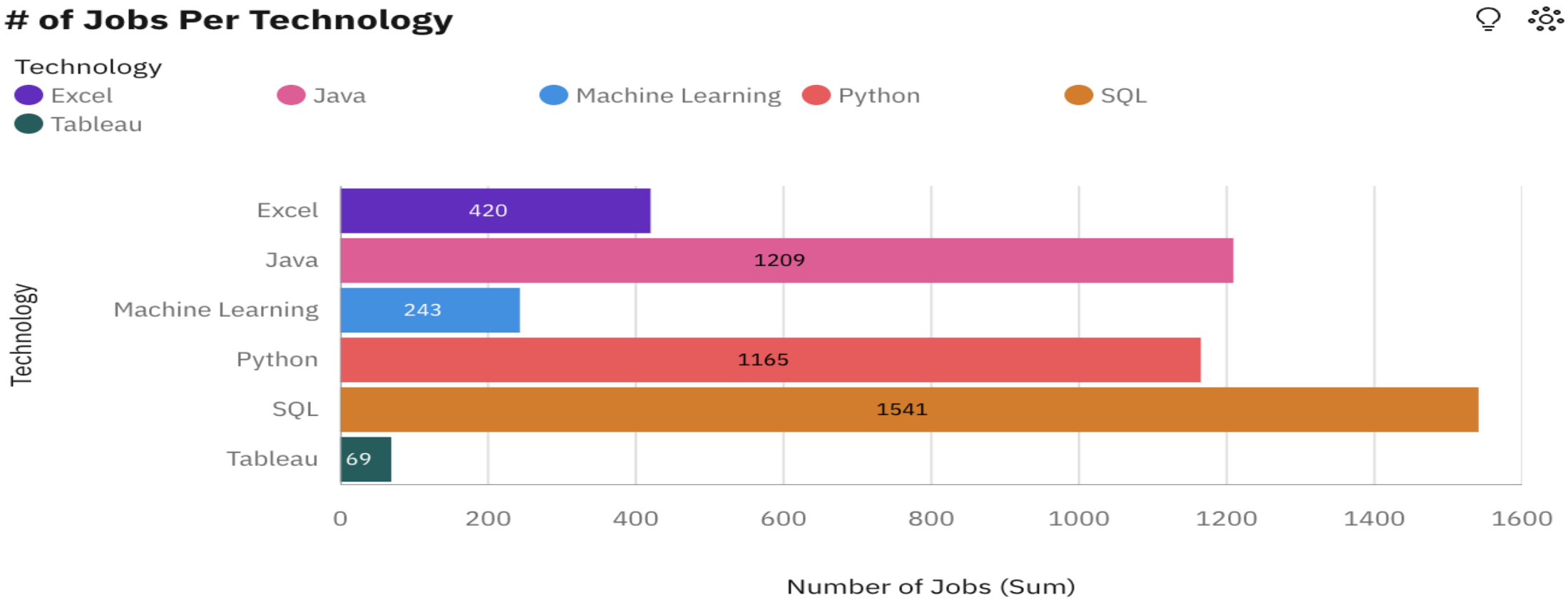
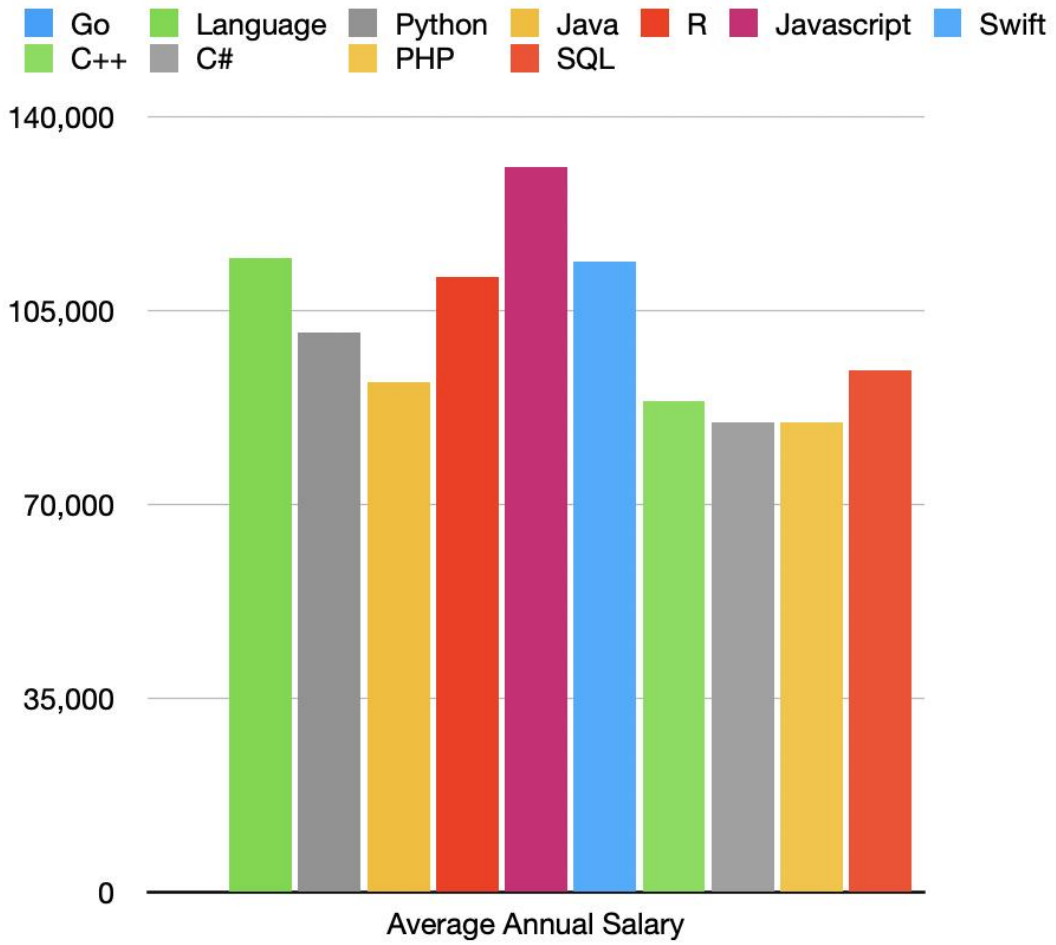
Firebird
Presto
RavenDB
TiDB

JOB POSTINGS



POPULAR LANGUAGES