

# ANALYZING TRENDS IN THE GLOBAL TECH COMMUNITY

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June 1 2025

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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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- Demographic Insights
- Technology Usage vs. Preferences
  - ❖ Identified current technology usage and compared with future technology trends
  - ❖ Identified top 10 languages and databases(current vs future)
  - ❖ Identified top 10 platforms and webframes (current vs future)
- Career Preferences and Work Environment
- Global Trends and Regional Variations
- Skill Demand and Future Outlook



# INTRODUCTION



## Purpose

Uncover actionable insights about global trends in the tech industry

- Tools and technologies professionals are using, what they aspire to work with
- How these factors relate to job satisfaction, compensation, and career decisions

## Target Audience

Human resources and talent acquisition teams, Tech Industry leaders

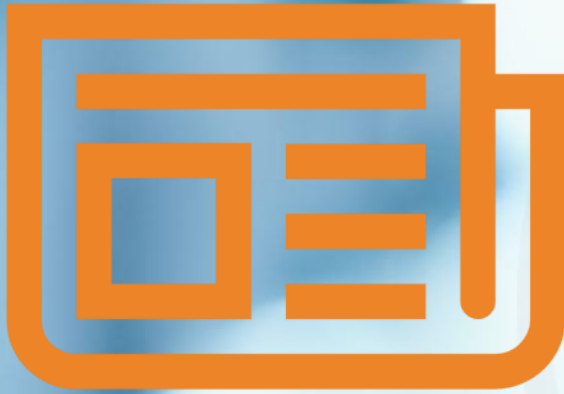
## Value

This analysis offers data-driven guidance for decision making in hiring, training, product development, and career planning



# METHODOLOGY

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## **Data Source**

- Dataset obtained from a Stack overflow developer survey
- Total respondents: 65,437

## **Data collection**

- Using API access
- Using web scraping techniques

## **Data wrangling**

- Handling duplicates
- Identifying and imputing missing values
- Normalize the data



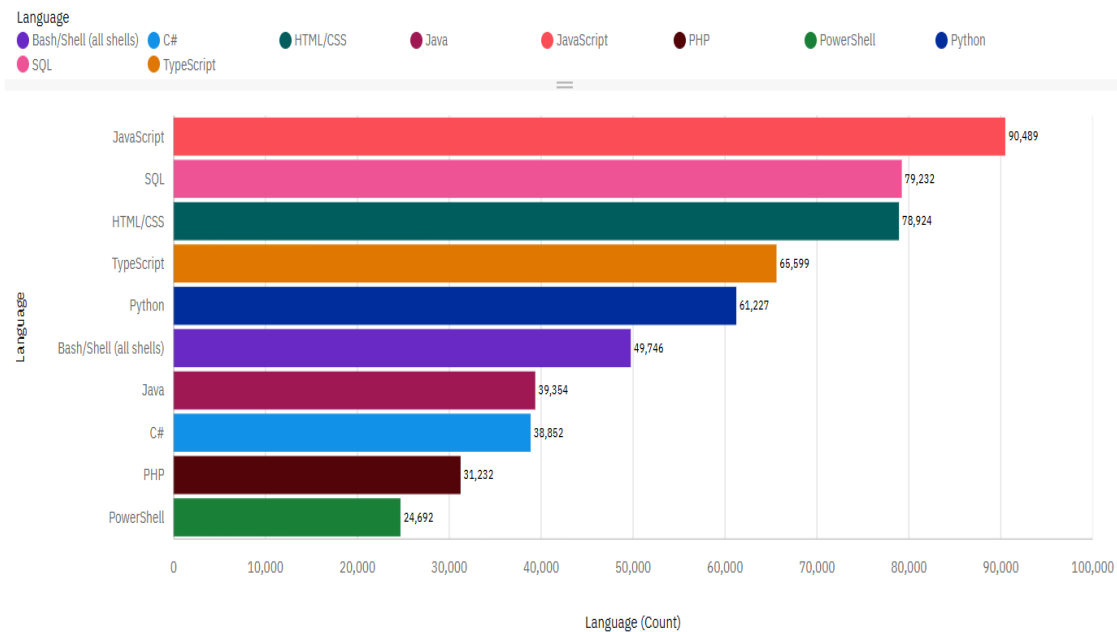


# PROGRAMMING LANGUAGE TRENDS

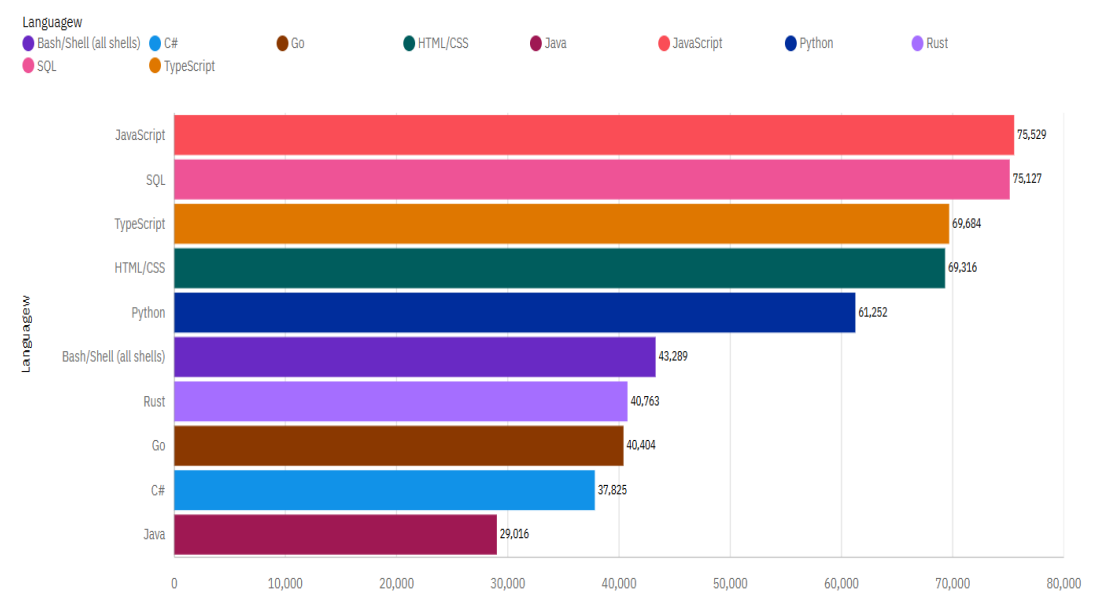
## Current Year

## Next Year

Top 10 LanguageHaveWorkedWith



Top 10 LanguageWantToWorkWith



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- Javascript and SQL seems to be top two languages
- Typescript and Python becoming popular in the future
- PHP and Powershell are out whereas GO and Rust will enter top 10

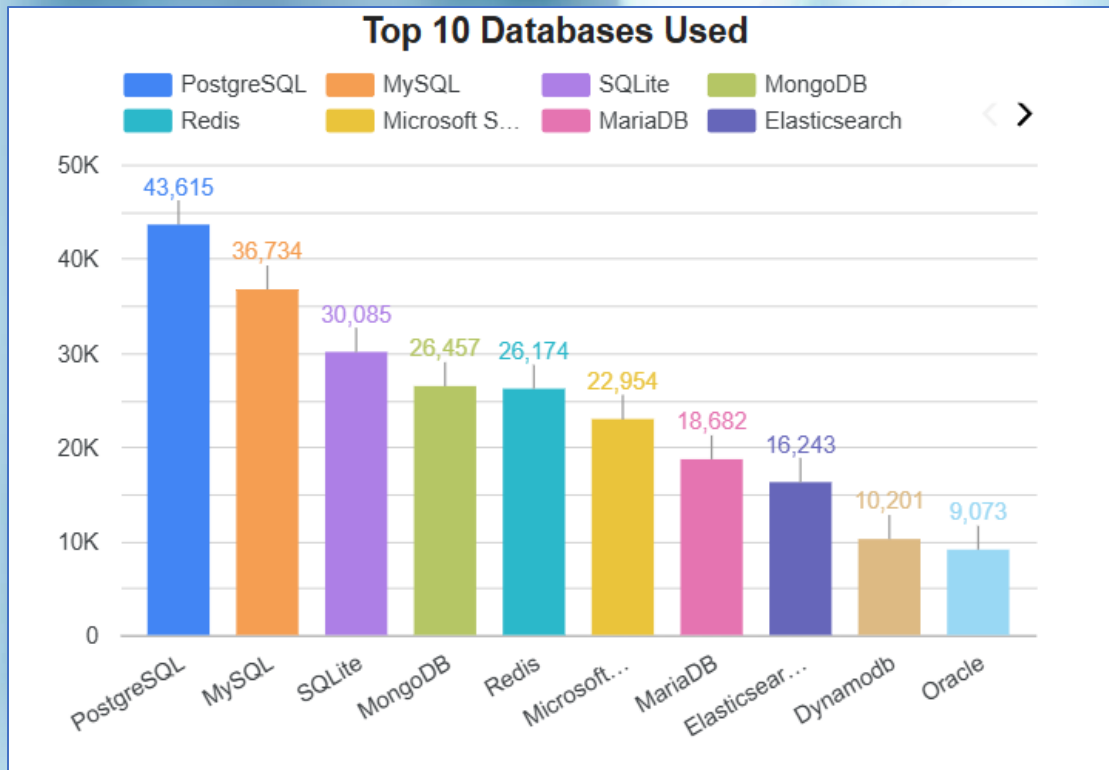
## Implications

- Organizations should continue to invest in JavaScript and SQL skills
- Python is best choice with AI and ML in rising demand
- Growing need in systems programming, cloud infrastructure, and backend development

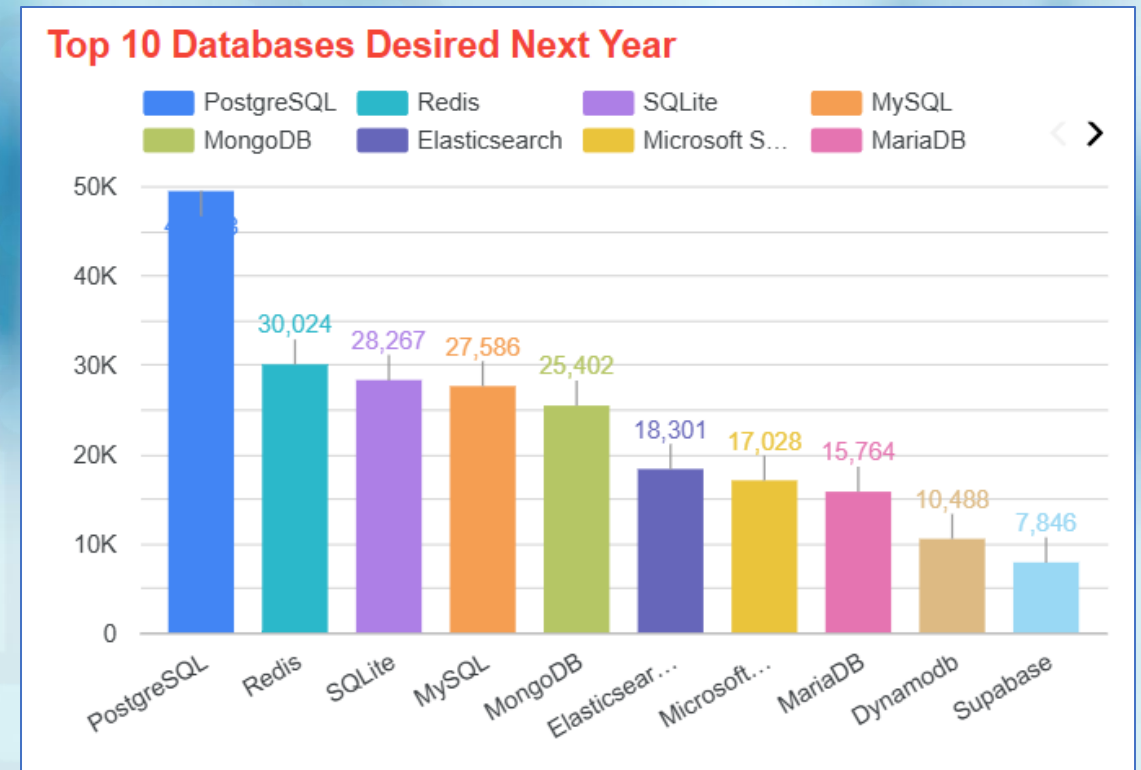


# DATABASE TRENDS

## Current Year



## Next Year





# DATABASE TRENDS - FINDINGS & IMPLICATIONS

## Findings

- Postgre seems to be top database used
- Declining interest in SQL and MongoDB
- Increasing interest in Redis and Elastic search

## Implications

- Postgre preferred choice for both startups and enterprises
- Redis-speed and efficiency, particularly in caching, real-time analytics, and high-performance applications
- ElasticSearch is becoming a go-to solution for indexing, logging, and real-time search in data analytics

# DASHBOARD

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## IBM cognos analytics Dashboard

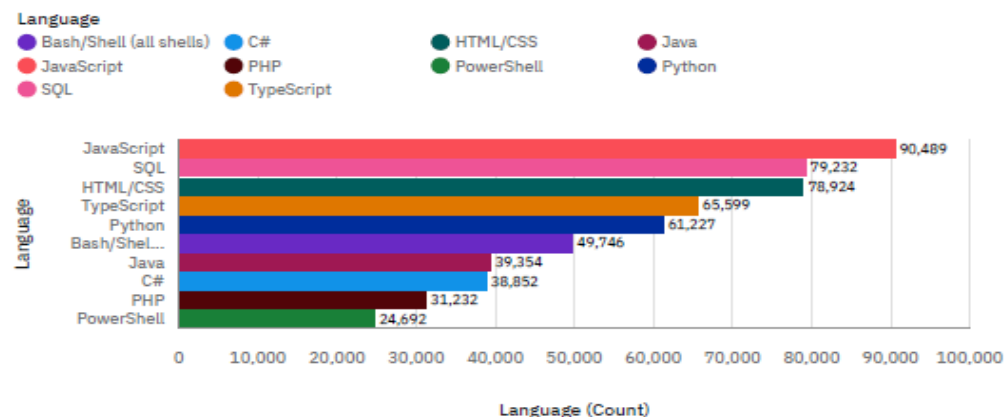
➤ [Click here](#)



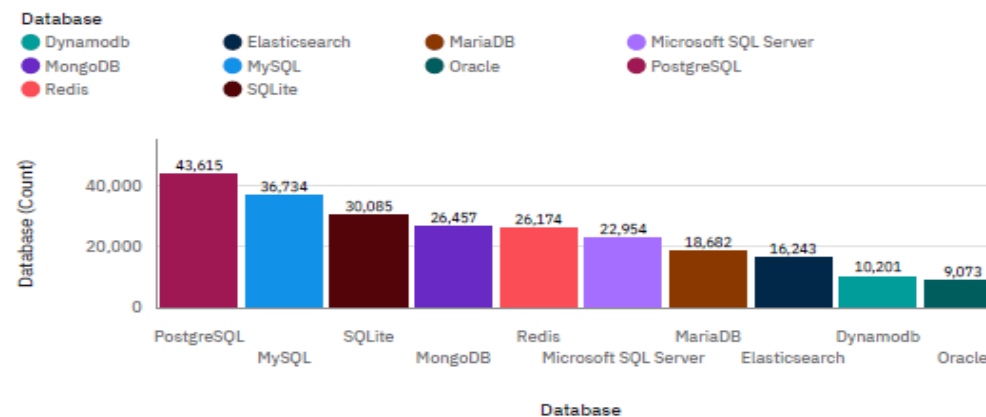
# CURRENT TECHNOLOGY USAGE

## Current Technology Usage

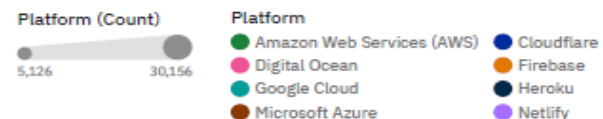
### Top 10 LanguageHaveWorkedWith



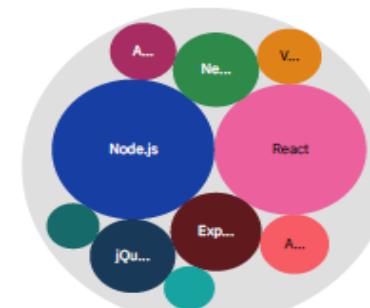
### Top 10 DatabaseHaveWorkedWith



### Top 10 PlatformHaveWorkedWith



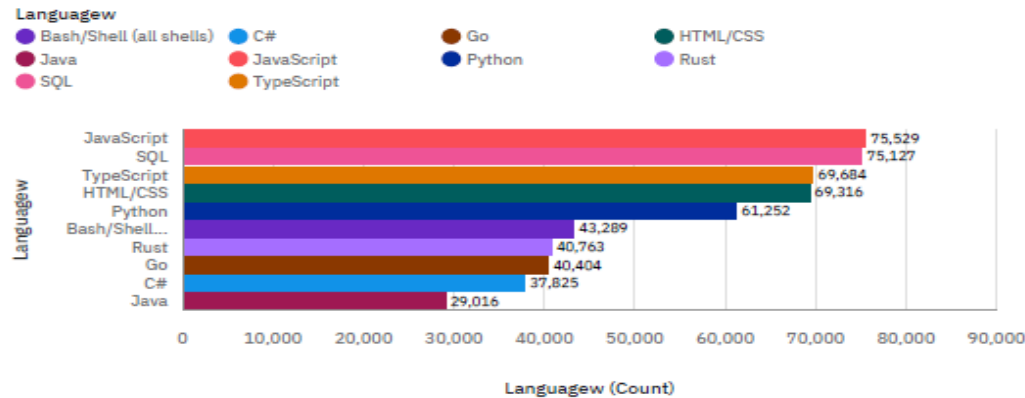
### Top 10 WebFrameHaveWorkedWith



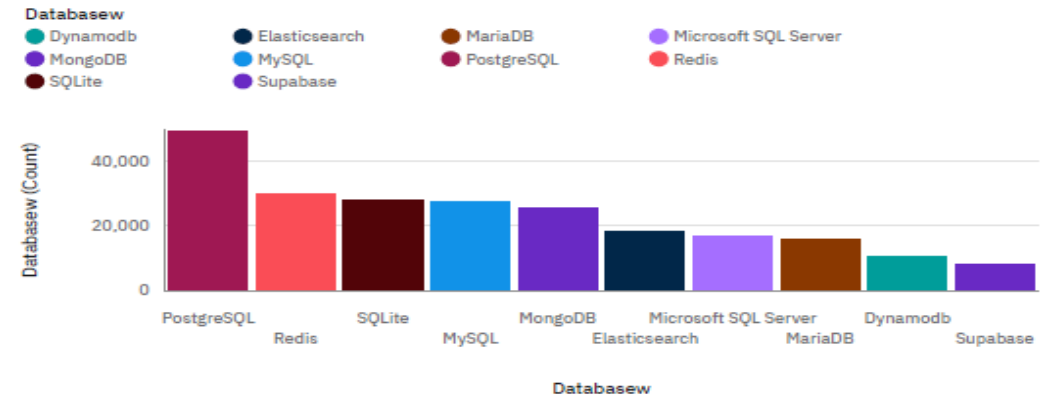
# FUTURE TECHNOLOGY TREND

## Future Technology Trend

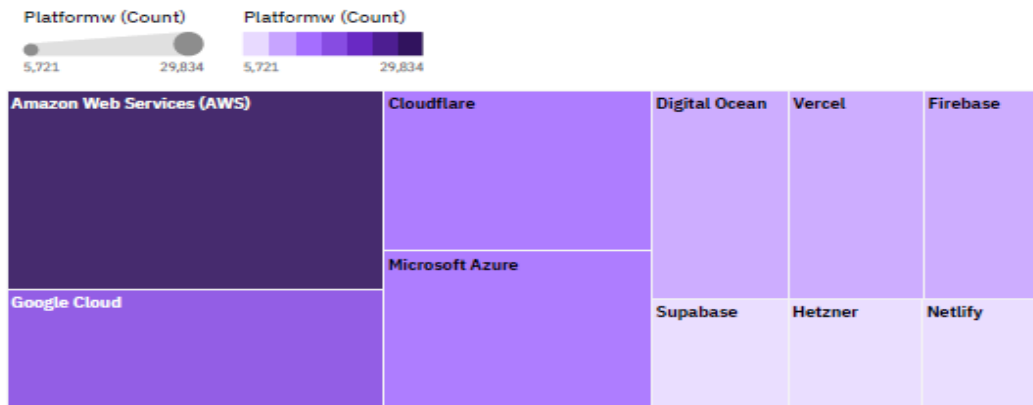
### Top 10 LanguageWantToWorkWith



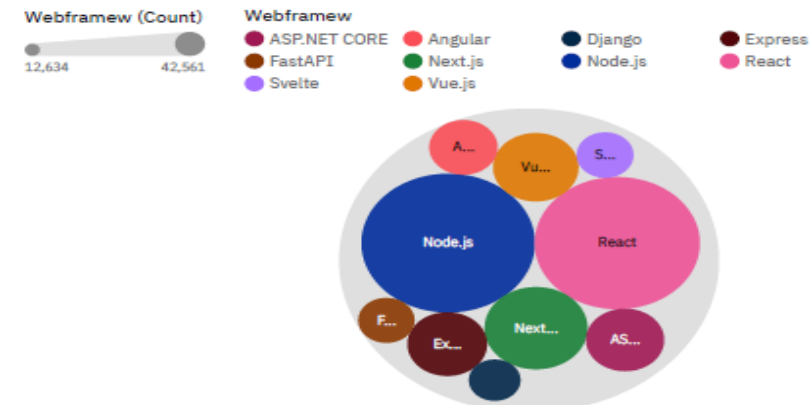
### Top 10 DatabaseWantToWorkWith



### Top 10 PlatformWantToWorkWith



### Top 10 WebframeWantToWorkWith



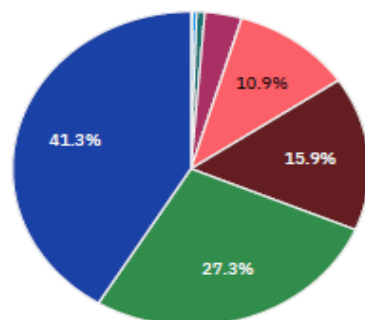
# DEMOGRAPHICS

## Demographics

Respondent distribution by Age

Age

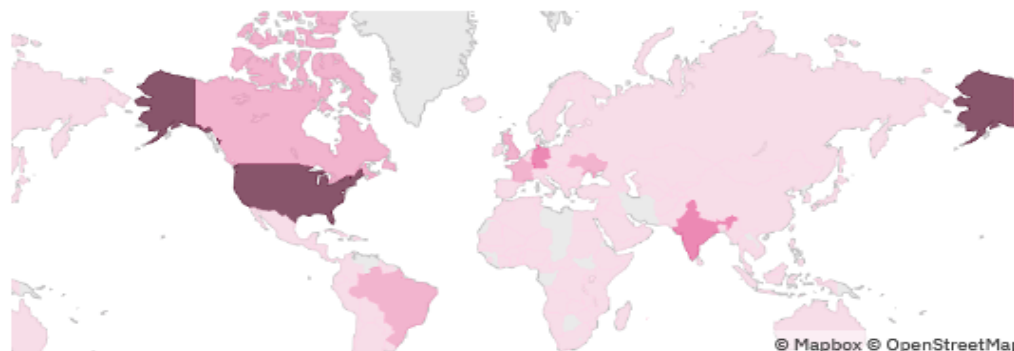
- Prefer not to say
- 65 years or older
- Under 18 years old
- 55-64 years old
- 45-54 years old
- 18-24 years old
- 35-44 years old
- 25-34 years old



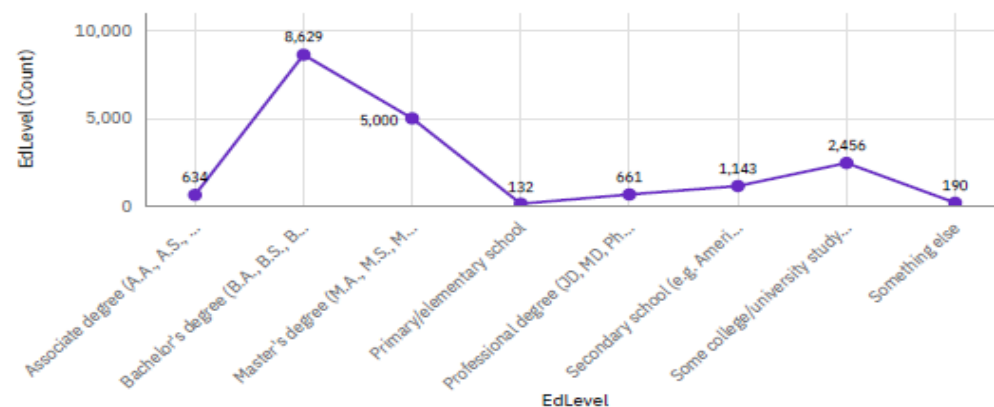
Respondent Distribution by Country

Country (Count)

1 3,441



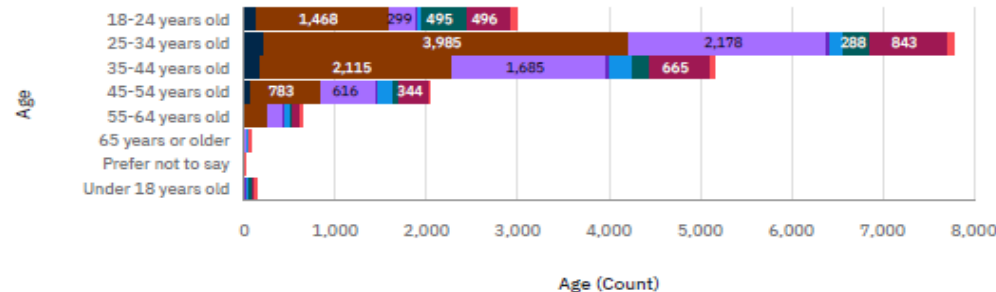
Respondent distribution by Formal Education Level



Respondent Count by Age, classified by Education Level

EdLevel

- Associate degree (A.A., A.S., etc.)
- Bachelor's degree (B.A., B.S., B.E...)
- Master's degree (M.A., M.S., M.En...)
- Primary/elementary school
- Professional degree (JD, MD, Ph.D...)
- Secondary school (e.g. American ...)
- Some college/university study wit...
- Something else





# DISCUSSION

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- Top skills for learners and workers to reskill
- Technology trends now and future
- Will AI be a job threat in the future?
- Training, mentorship, and career growth programs for young developers



# OVERALL FINDINGS & IMPLICATIONS

## Findings

- ✓ JavaScript is the top language used and TypeScript gains popularity
- ✓ PostgreSQL has surpassed MySQL in popularity
- ✓ AWS remains dominant, followed by Azure and Google Cloud
- ✓ The majority of developers are between 25 and 34 years old indicates emerging young talent into the field
- ✓ Most developers hold a BA/BS or MA/MS degree

## Implications

- ❖ Teams should prioritize support and hiring around top technologies
- ❖ Companies should consider standardizing cloud infrastructure on AWS
- ❖ Provide access to curated learning platforms, documentation, and sandbox environments
- ❖ Need to spread technology in lagging countries



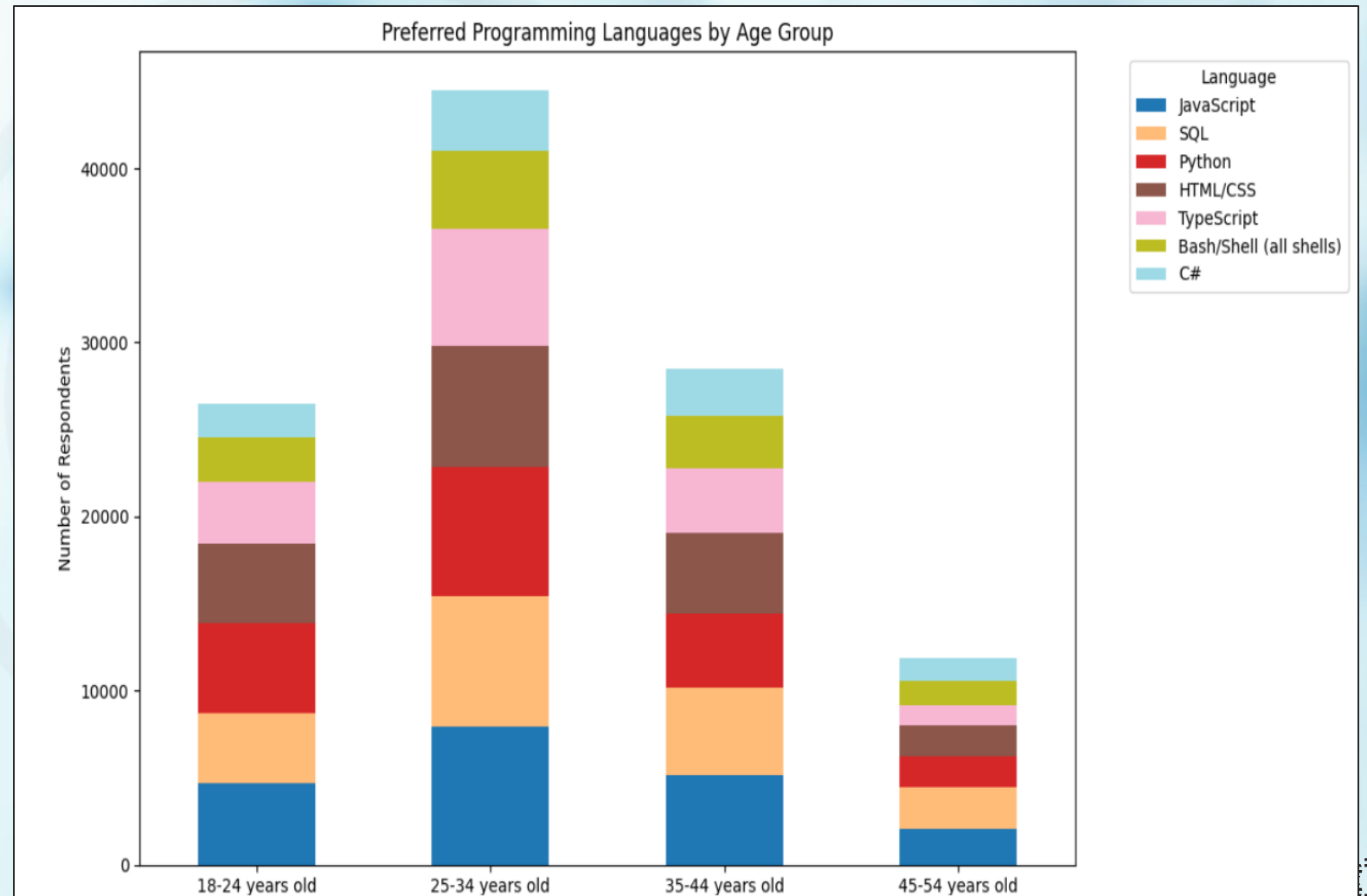
# CONCLUSION



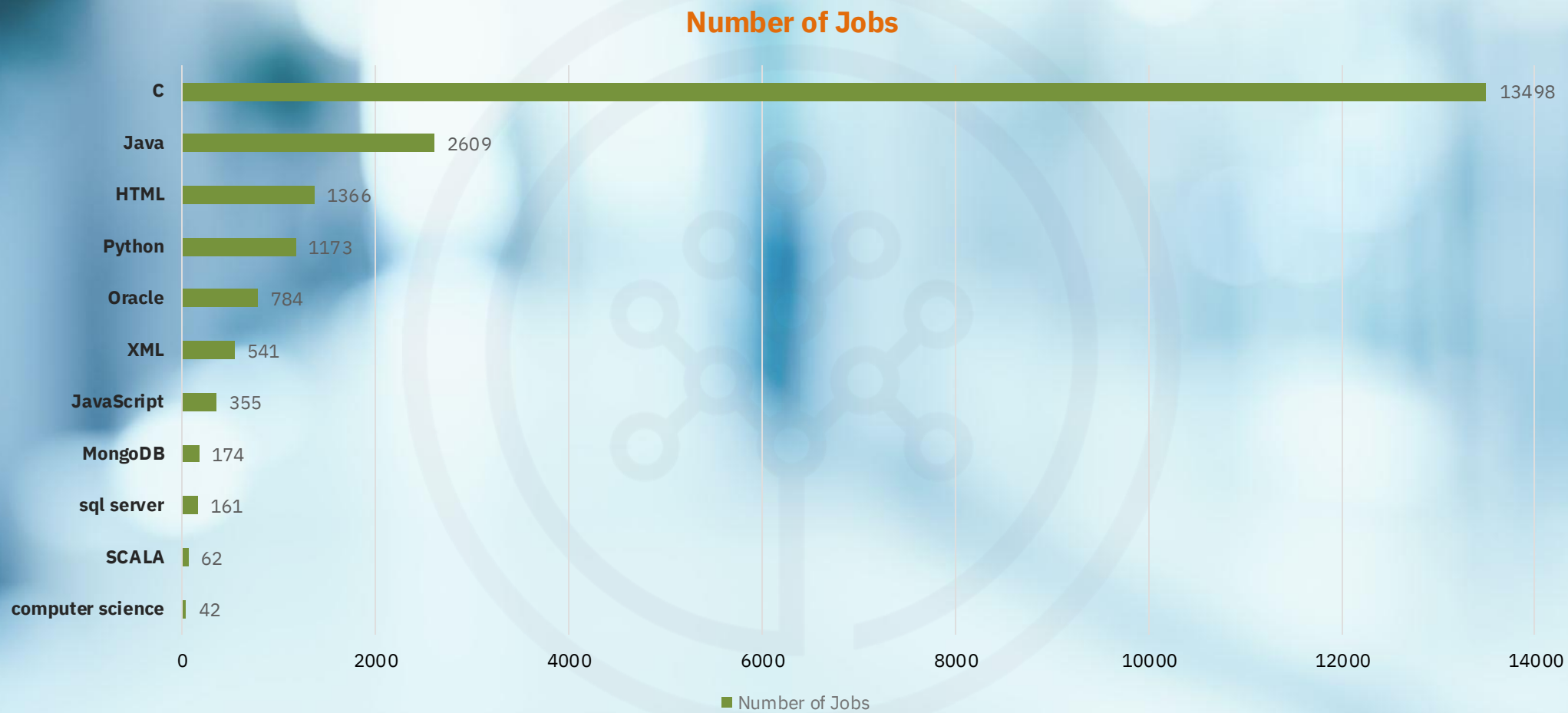
- JavaScript, SQL, TypeScript continue to dominate, shaping the modern tech landscape
- Continuous self-learning and online resources are critical for skill development
- The developer community remains young and globally diverse
- Organizations that align with these trends and invest in training, inclusion, and flexible work are better positioned for success



# APPENDIX



# JOB POSTINGS





# POPULAR LANGUAGES

