



# Tech Respondents Survey Analysis

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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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- The dataset provides comprehensive insights into the demographics, employment, and work preferences of software developers.
- It includes variables related to education, job satisfaction, salary, coding practices, location and various personal attributes.
- This summary highlights key findings and trends based on the data analysis.

# INTRODUCTION

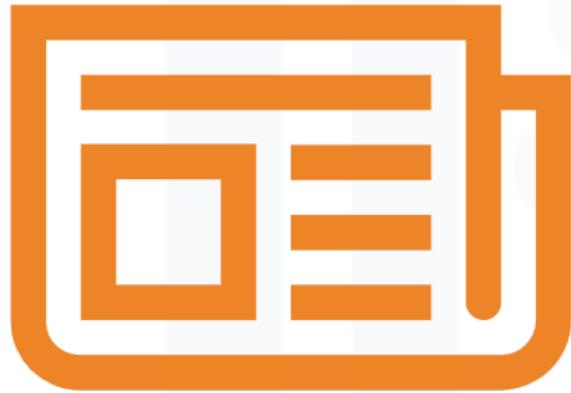
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- This report analyzes a dataset of Technologist including developers to understand their professional background, work environment, and personal characteristics.
- The goal is to identify trends, challenges, and opportunities within the developer community.
- The survey dataset collected by Job-API

# METHODOLOGY

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- The analysis was conducted using statistical and data visualization techniques
- Data Collection: Different resources scrapping and APIs
- Data Cleaning: Removing duplicates and handling missing values.
- Data Exploration: Initial examination of data distributions and correlations.
- Statistical Analysis: Performing descriptive and inferential statistics.
- Visualization: Creating charts and dashboards to represent findings.

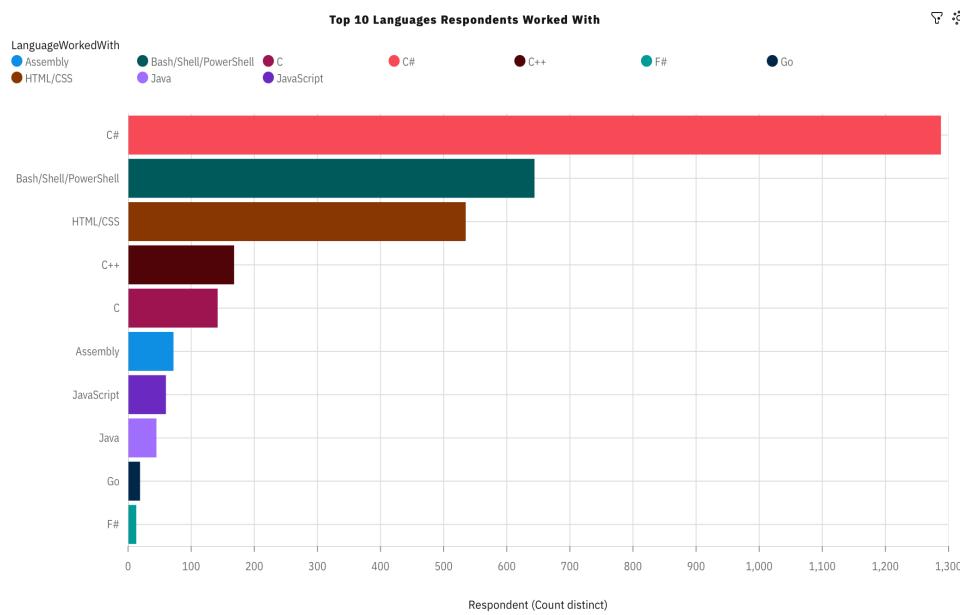
# RESULTS

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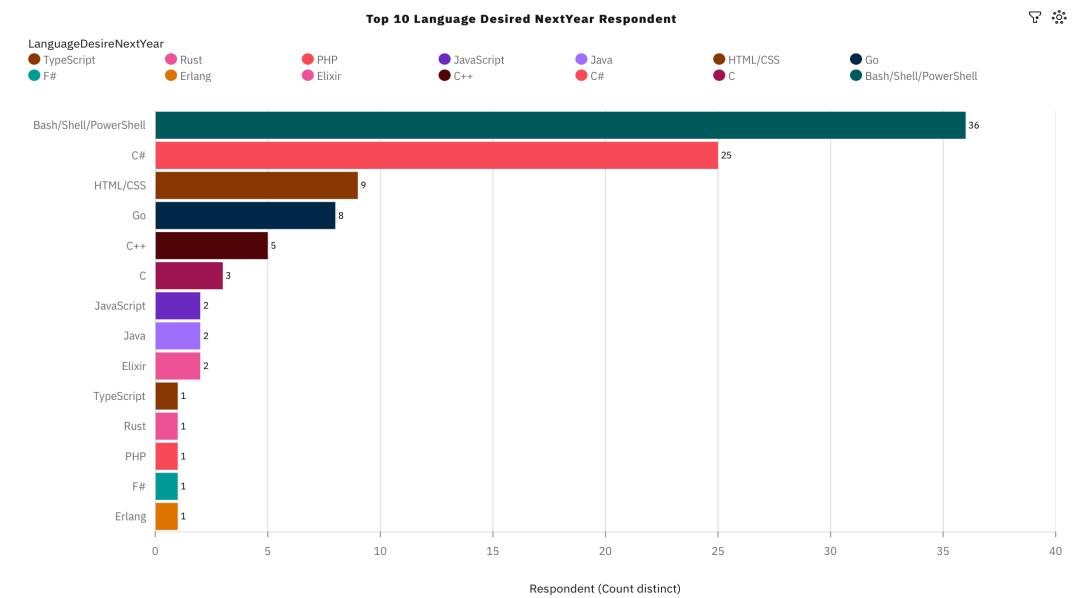
- Country United Republic of Tanzania has the highest Average Age but is ranked has only Respondent.
- Country United States has the highest Respondent but is ranked 16 in Average Age.
- The Highest Education Level is Bachelor's degree (BA, BS, B.Eng., etc.)
- The amount of working hours its not correlated to Age
- The older age the higher Salary
- Newcomers should focus on obtaining a bachelor's degree, recognize that salary tends to increase with age, and understand that working hours do not impact age. Additionally, being aware of the varied demographic profiles across countries can help in understanding global industry trends.

# PROGRAMMING LANGUAGE TRENDS

## Current Year



## Next Year



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

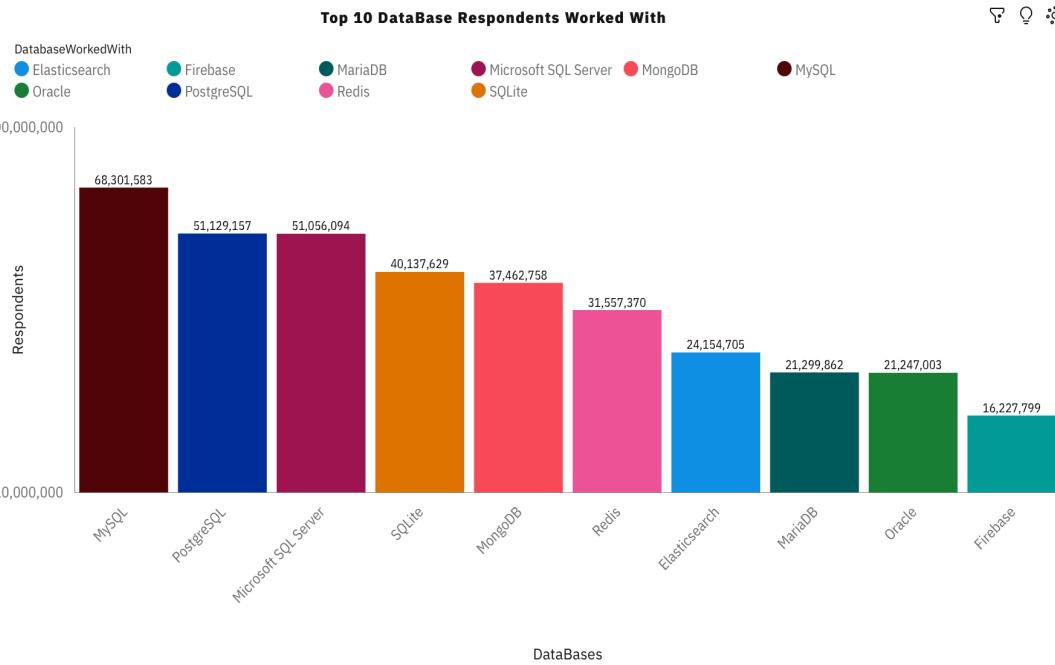
- C# is the most frequently occurring category of Language Worked With with a 43.1 % in total
- HTML/CSS Language is the most Worked With 47% to MySQL compared to 22% for Microsoft SQL Server

## Implications

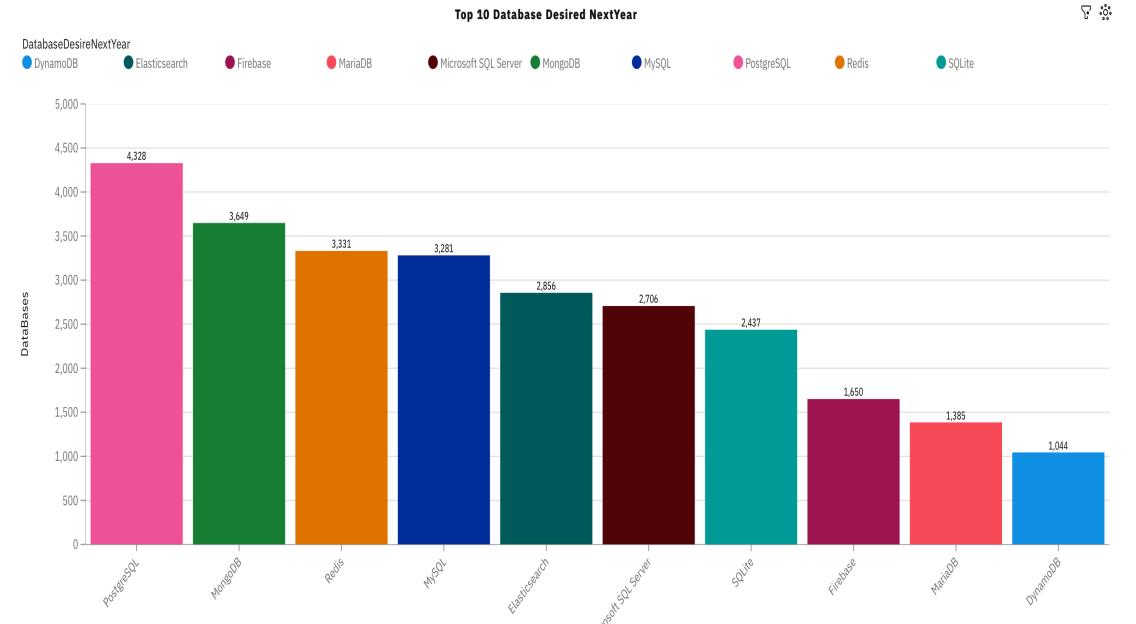
- The high number of respondents working with JavaScript, combined with its continued prominence in desired languages
- Implication 2**

# DATABASE TRENDS

## Current Year



## Next Year



# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- The most Database Worked With is MySQL contributed the most at **nearly 17 million**.
- Microsoft Azure the most worked with platform

## Implications

- The high demand for Elasticsearch, particularly among users of Bash/Shell/PowerShell, suggests organizations should adopt and enhance support for Elasticsearch
- Companies should prioritize Linux-based systems and Docker containerization to remain competitive and appealing to developers
- SQL skills is essential organizations need provide training to maintain demand and competition

# DASHBOARD

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<[https://github.com/Majeedraheem/Final\\_Project-.](https://github.com/Majeedraheem/Final_Project-.)>

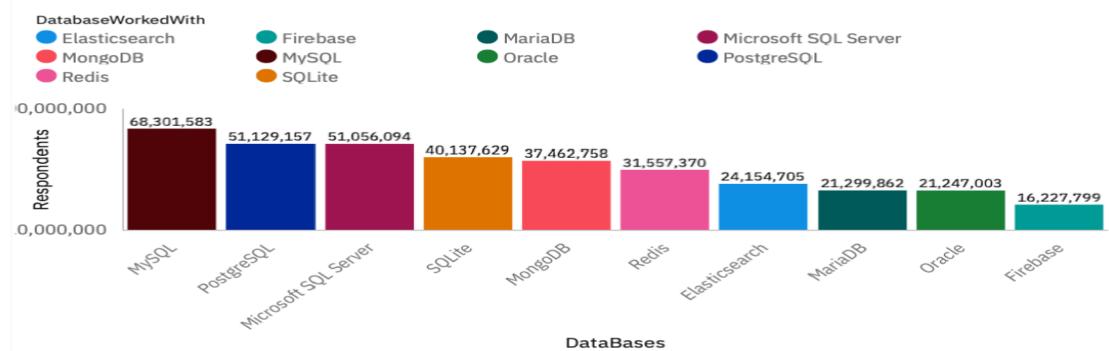
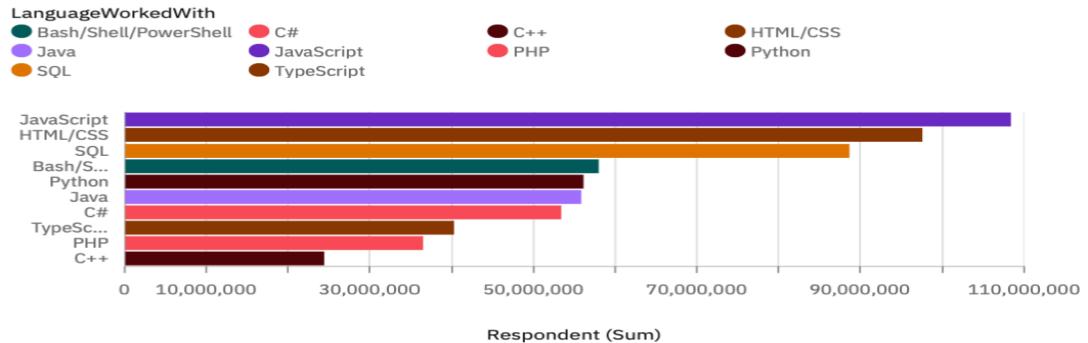
# Current Technologies

Current Technology Usage

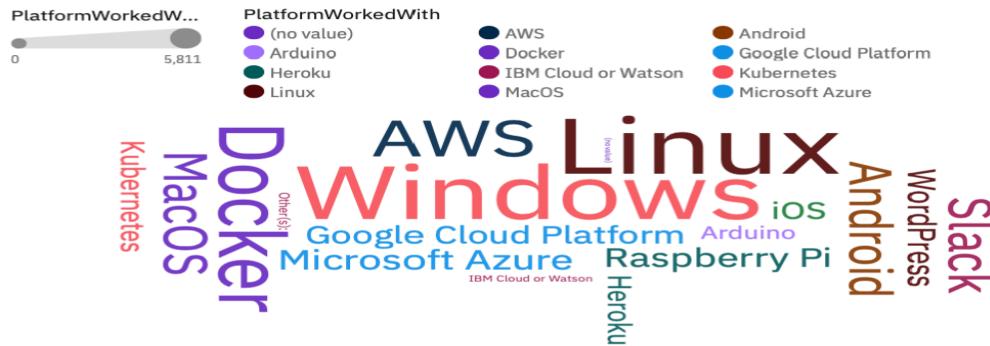
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Current Technology Usage

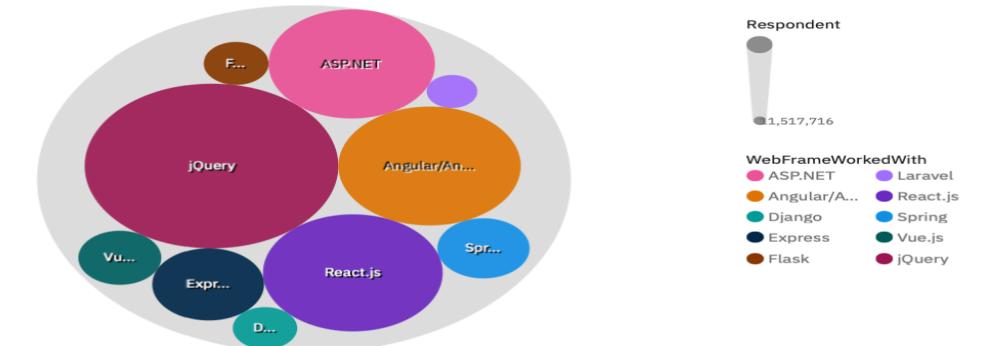
**Top 10 Languages Respondents Worked With**



**Platform Respondents Work With**



**Top 10 WebFrame Respondents Work with**



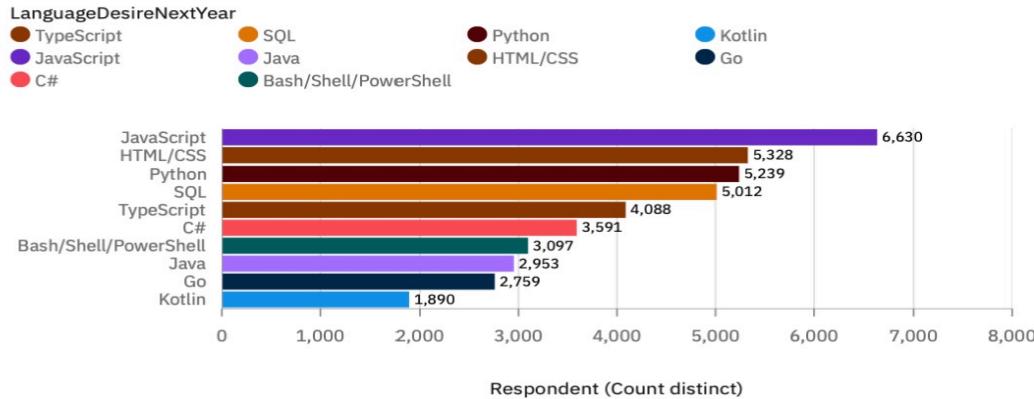
# Future Technologies

Future Technology Trend

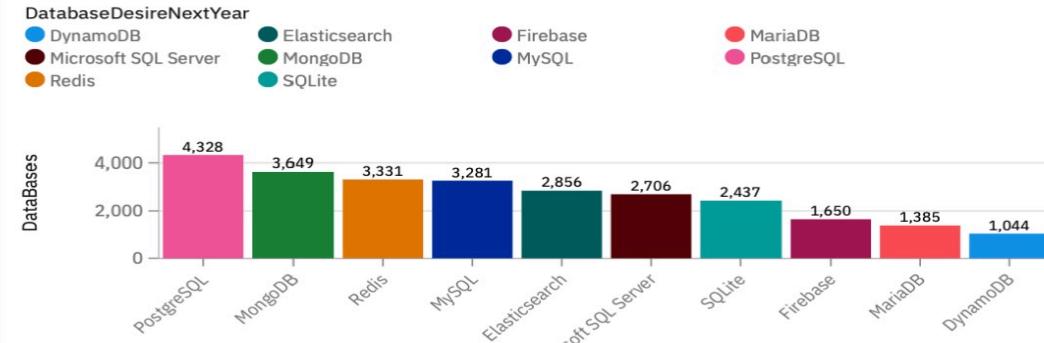
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Future Technology Trend

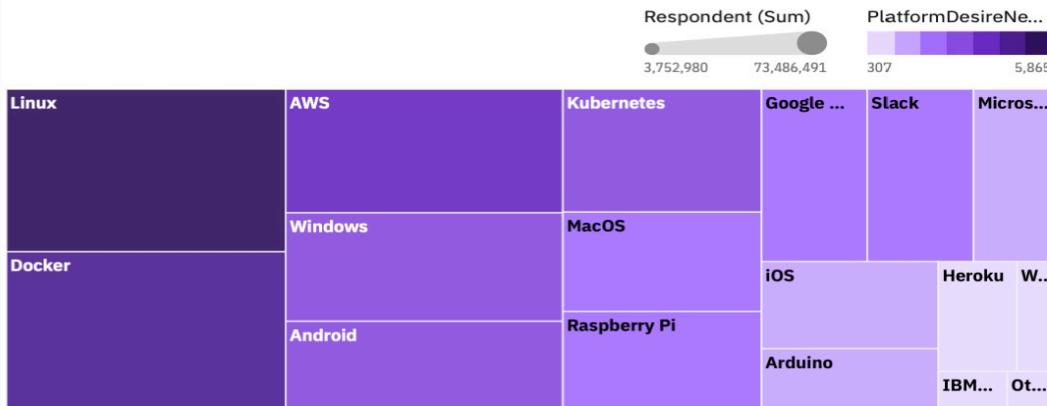
**Top 10 Language Desired NextYear Respondent**



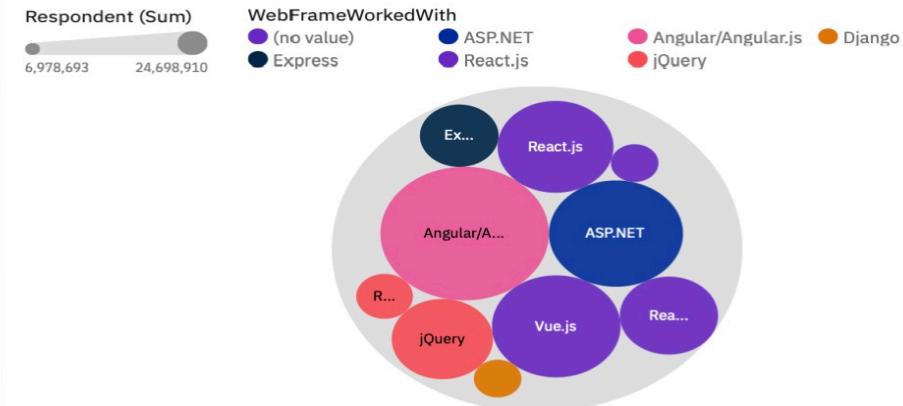
**Top 10 Database Desired NextYear**



**Platform Desired NextYear**



**WebFrame Desired Next Year**

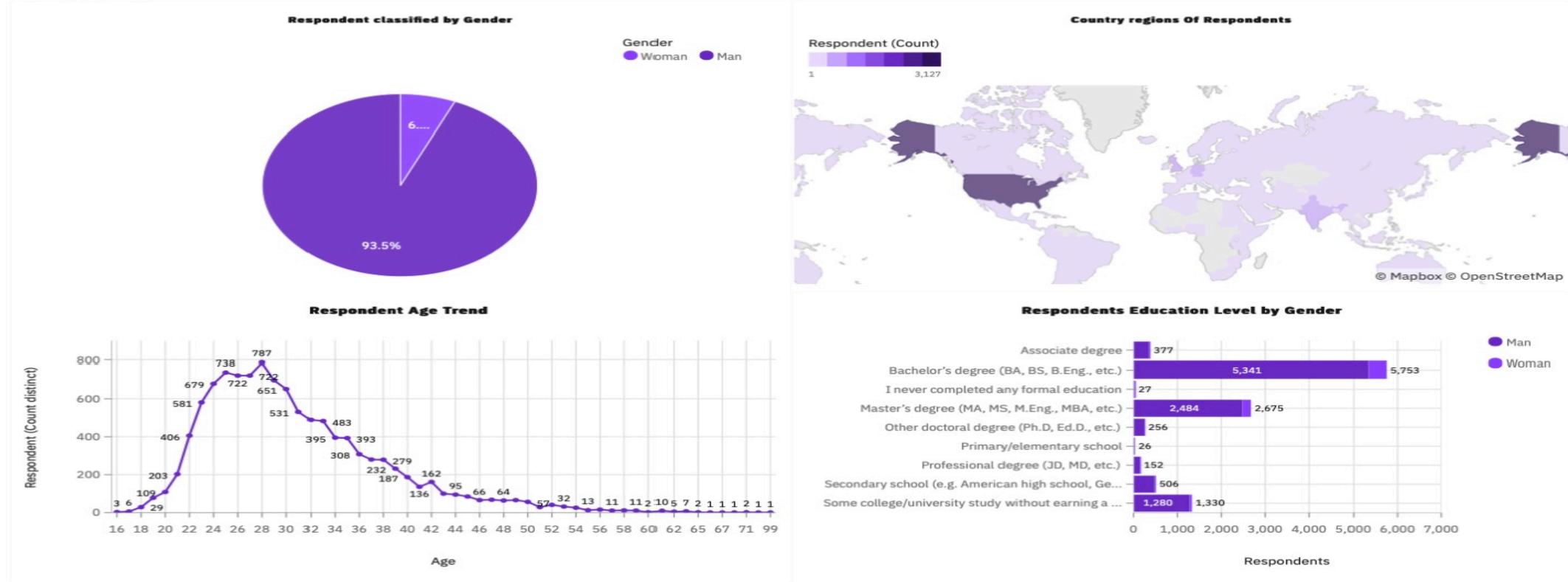


# Demographic

Demographics

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Demographics



# DISCUSSION

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- Would Working location matter to have better life ?!



# OVERALL FINDINGS & IMPLICATIONS

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## Findings

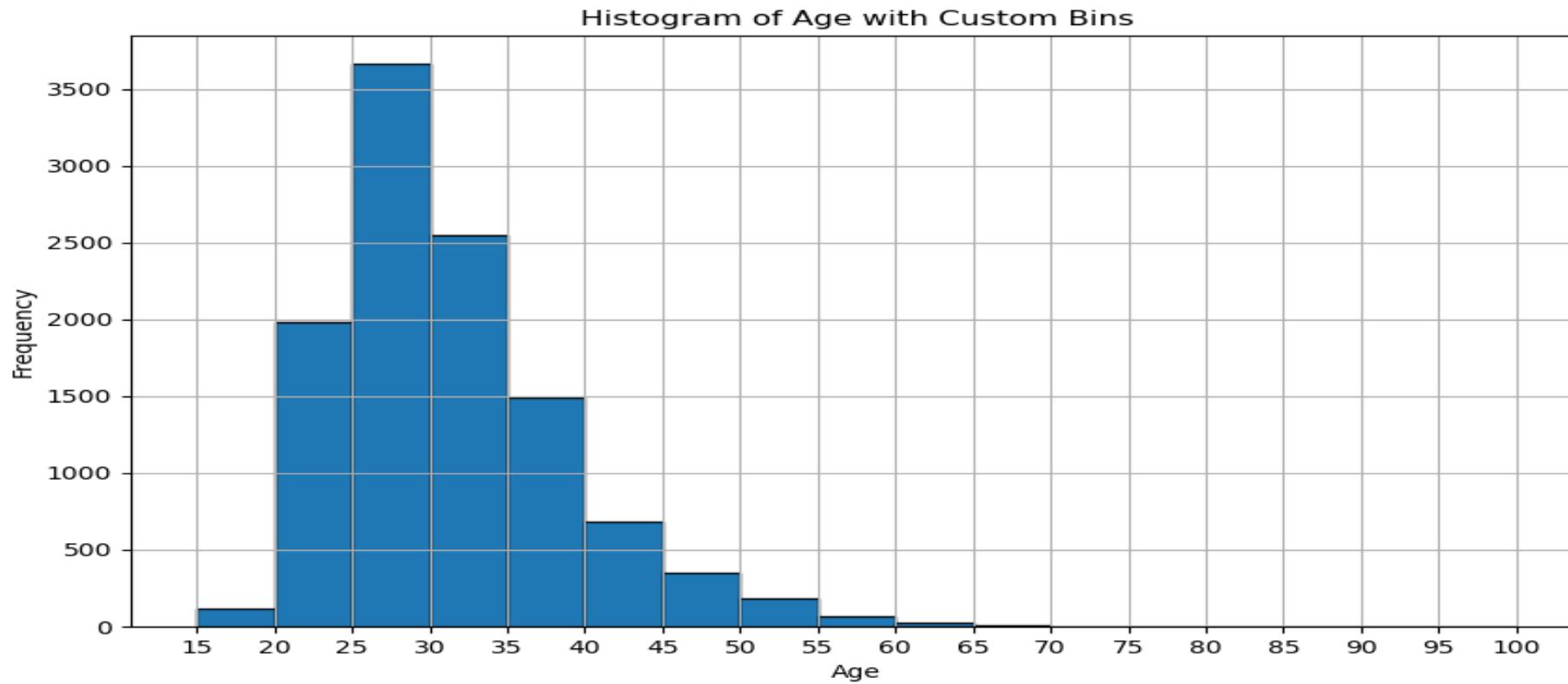
- Desired Database is Elasticsearch has the highest Respondent due to Language worked WithBash/Shell/PowerShell.
- For Respondent, the most significant values of Platform Desired Next Year are Linux and Docker
- Language Desired for Next Year is SQL

## Implications

- The high demand for Elasticsearch, particularly among users of Bash/Shell/PowerShell, suggests organizations should adopt and enhance support for Elasticsearch
- Companies should prioritize Linux-based systems and Docker containerization to remain competitive and appealing to developers
- SQL skills is essential organizations need provide training to maintain demand and competition

# The Age Distribution

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# CONCLUSION

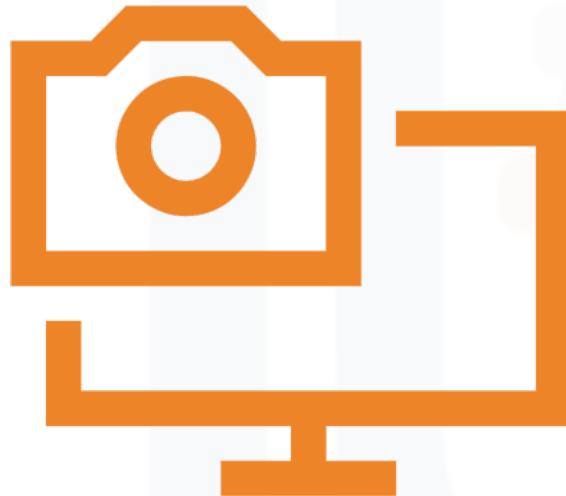
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- **Average Salary Comparison:**
  - Men earn an average of \$74,488 annually, while women earn \$57,692.
- **Age Distribution:**
  - The average age of respondents is 30 years.
- **Language Demand:**
  - Typescript and JavaScript are highly desired. Newcomers should focus on mastering these languages to boost career prospects.
- **Platform Preferences:**
  - Skills in Linux, Docker, and popular platforms like Android are in demand. Newcomers should gain proficiency in these areas to stay competitive.
- **Education:**
  - Most respondents hold a bachelor's degree. Aspiring developers should aim for at least a bachelor's degree to align with industry standards.
  - Emphasizing skills in Typescript, JavaScript, Linux, Docker, and obtaining a bachelor's degree will help newcomers build a strong foundation for a successful career in software development.

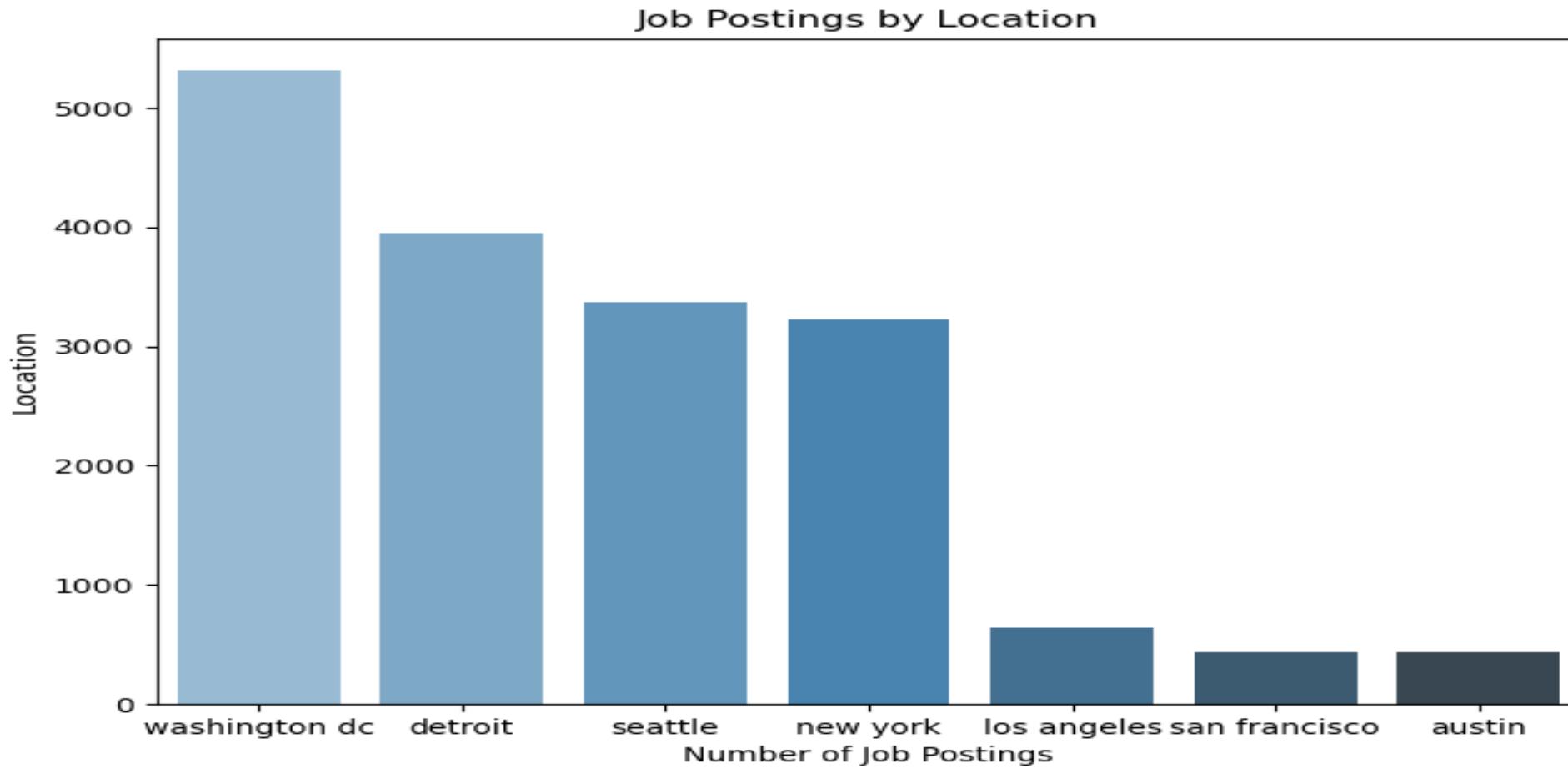
# APPENDIX

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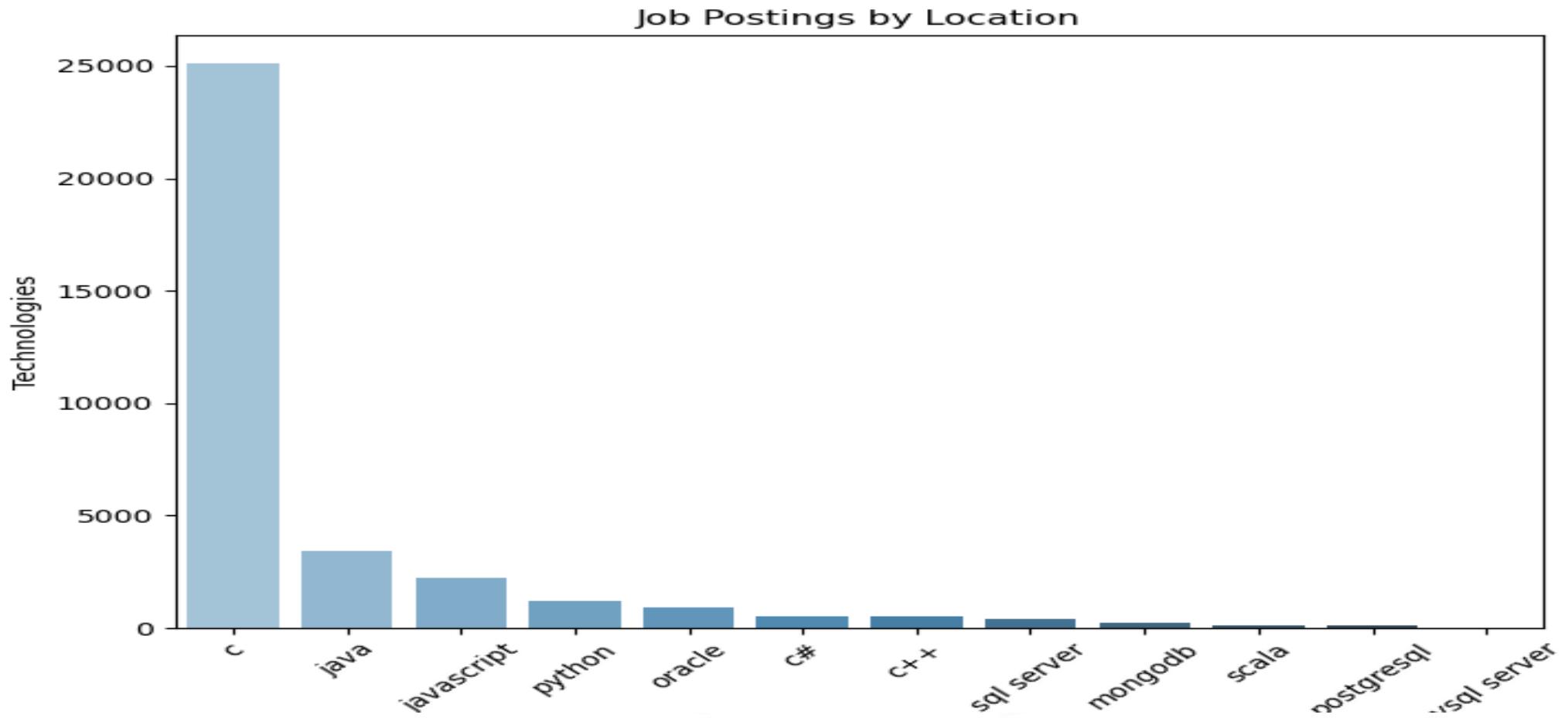
- Compression graph for annual compensation with and without outlier
- Work location Matter
- Annual salary compression with & without outliers

# JOB POSTINGS

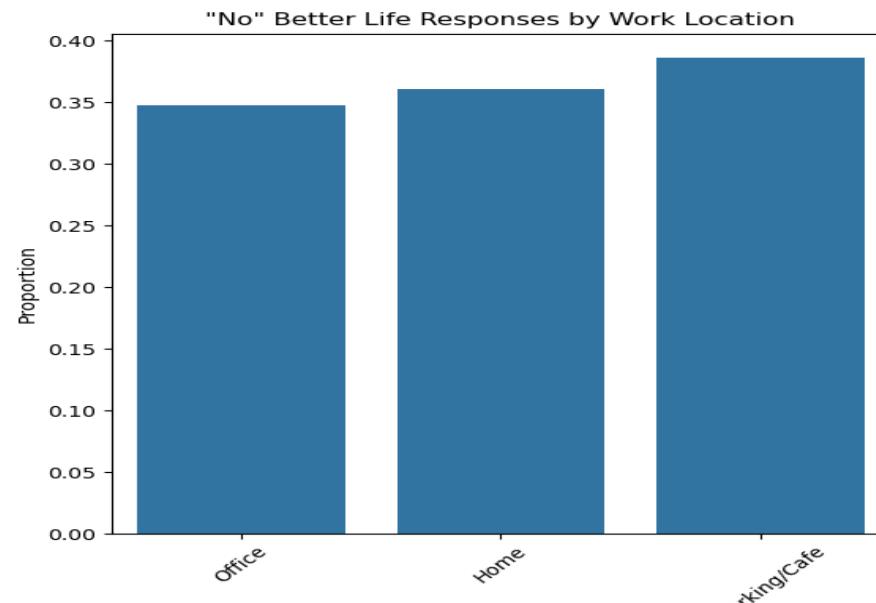
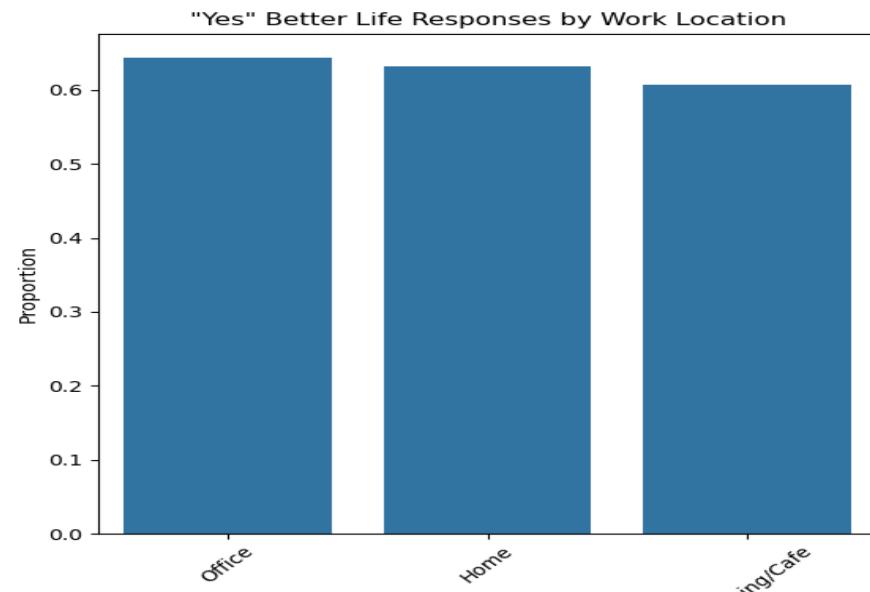


# POPULAR LANGUAGES

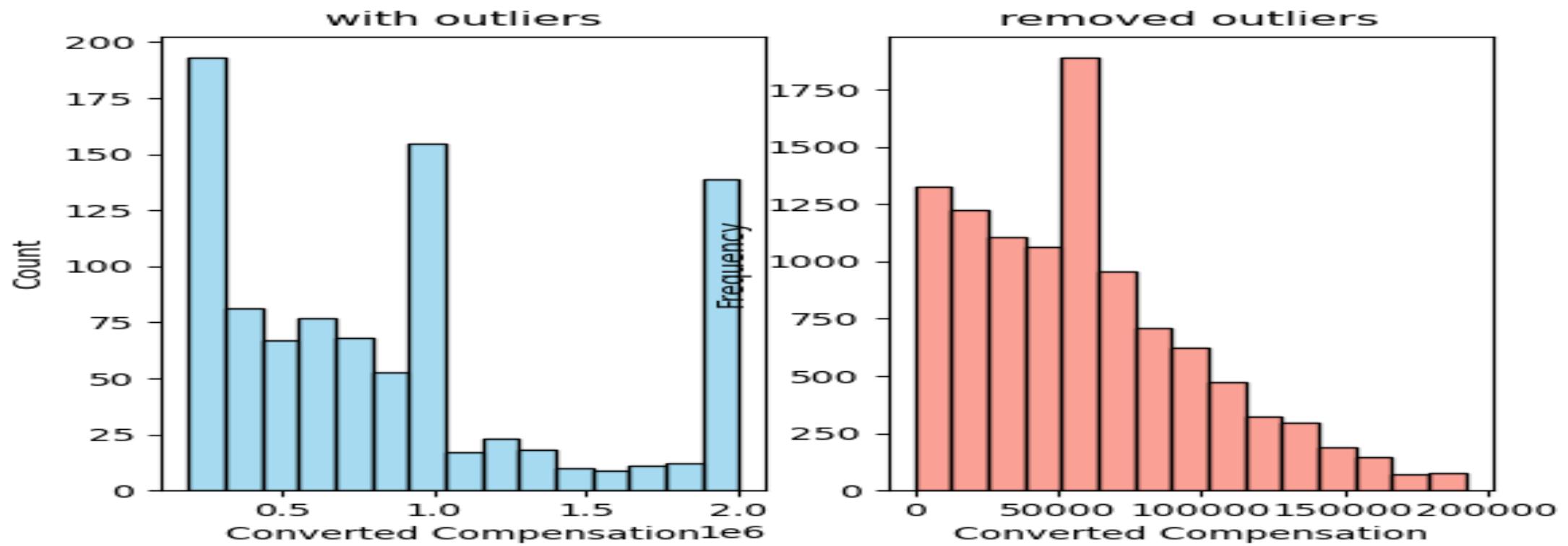
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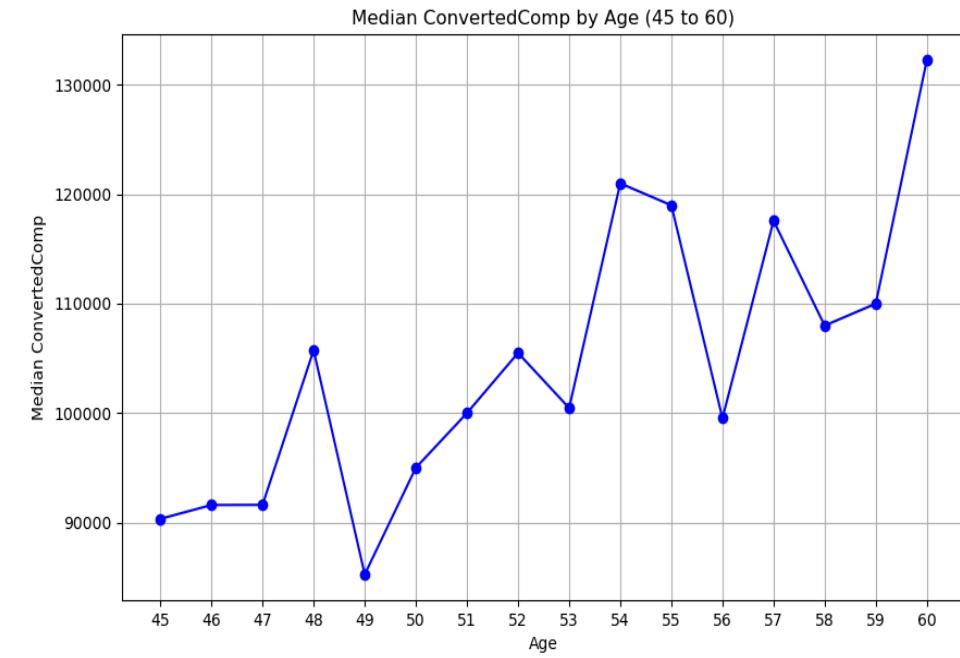
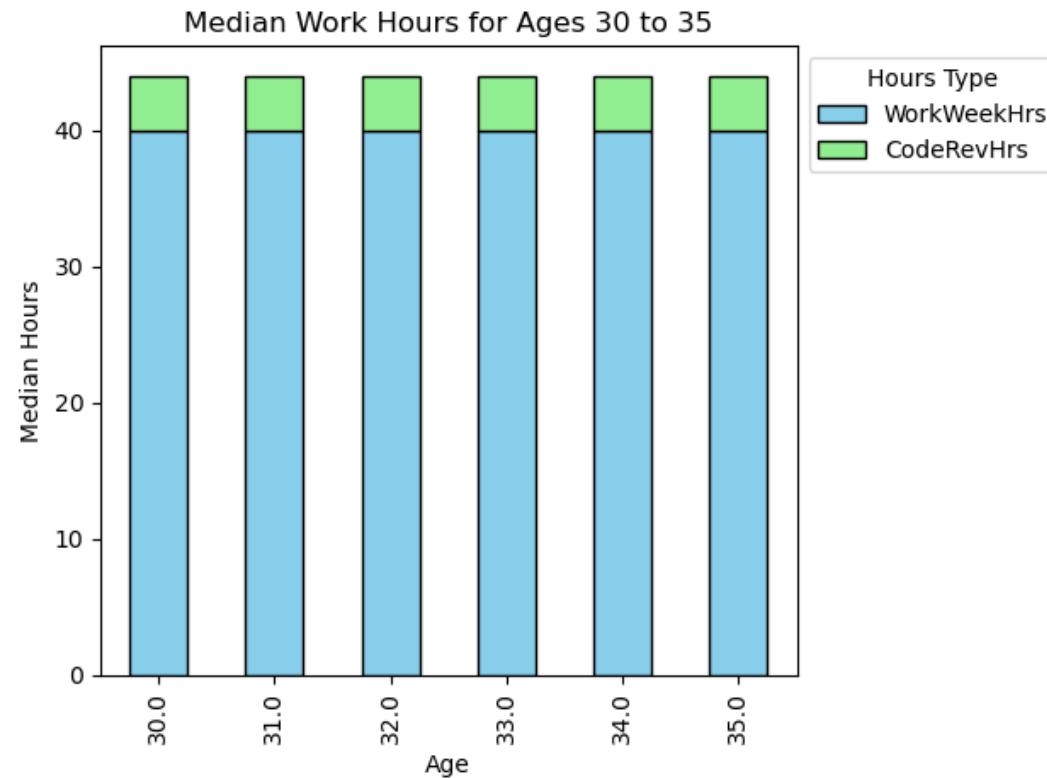
# Work location Matter



# Annual salary compression with & without outliers



# Age is correlated to salary annual compensation



# Working hours and Age correlation ?

