



Analysis of Technology

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OUTLINE



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 - Dashboard
- Discussion
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EXECUTIVE SUMMARY



- Java is preferred language worked with – Current and future
- Desired Databases in Future
 - PostgreSQL
 - MongoDB
 - Redis
- Response by Gender – 93% Male
- Current Web Frame Worked With - JQuery
- Desired Web Frame – React.js

INTRODUCTION



- Analyze Technology and programming data to identify future requirements,
- Collect Data and analyze
- Display results
- Answers
 - What is top language in demand?
 - What is top database in demand?

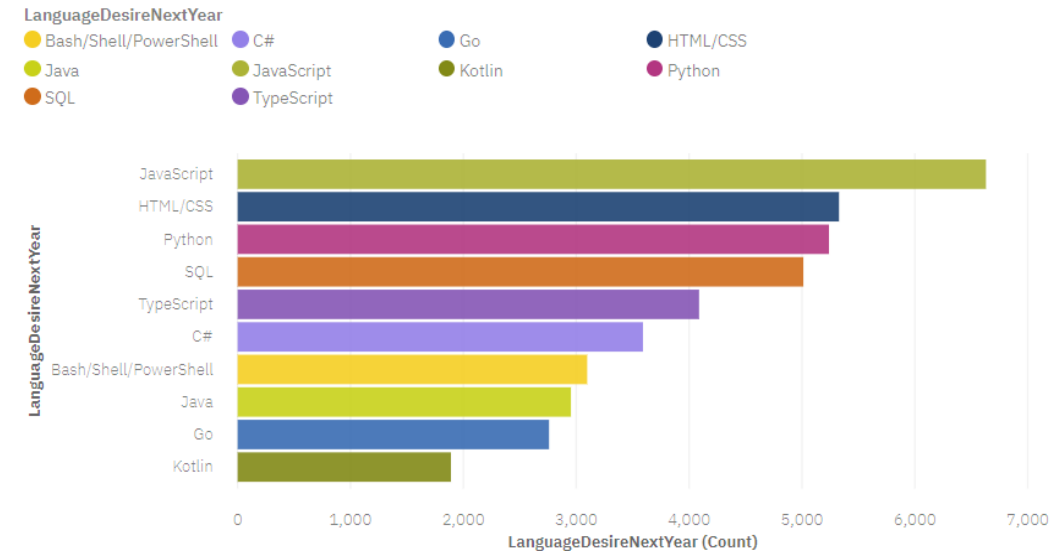
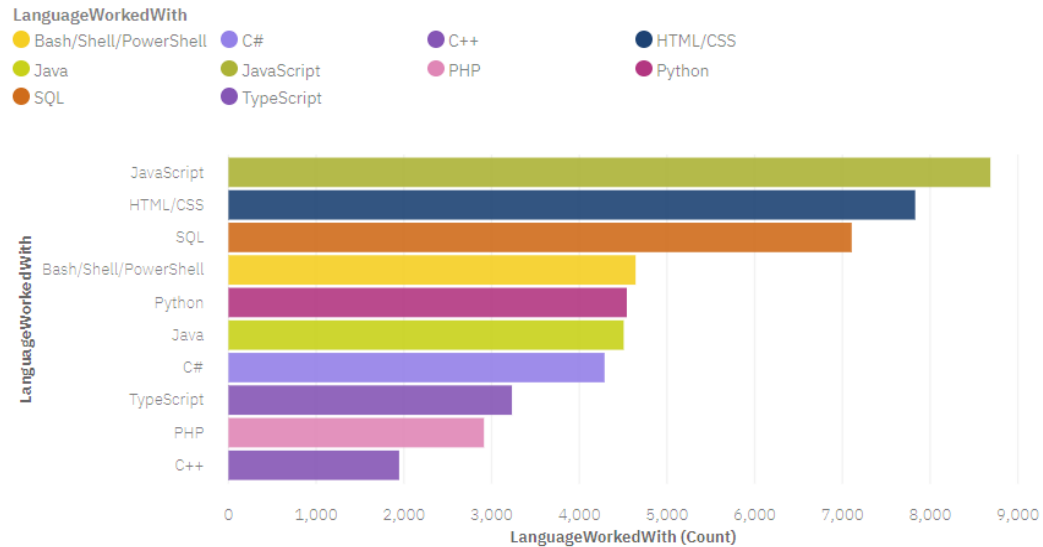
METHODOLOGY



- Data Sources
- Data Exploration
- Data Wrangling
- Data Visualization
 - Dashboard
 - Findings

RESULTS

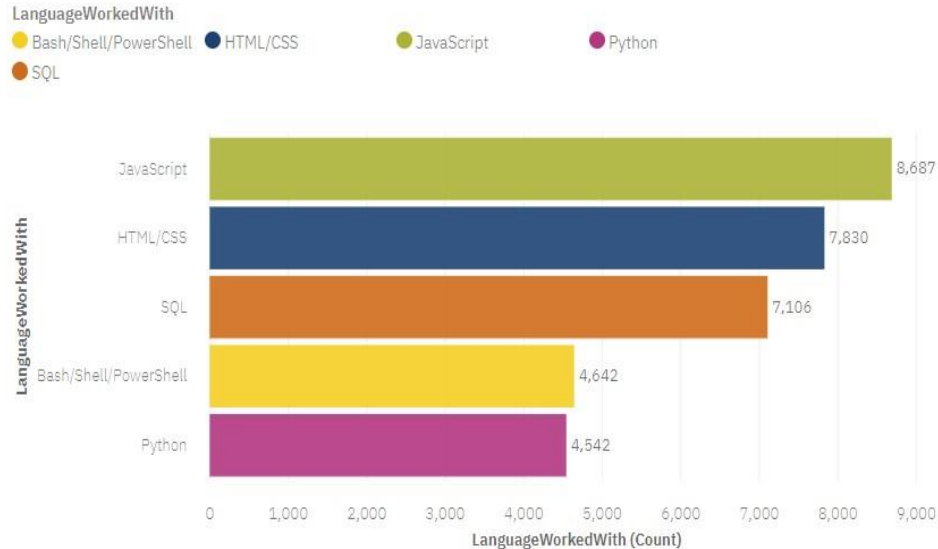
JavaScript and HTML/CSS top worked with as well as desired language



PROGRAMMING LANGUAGE TRENDS

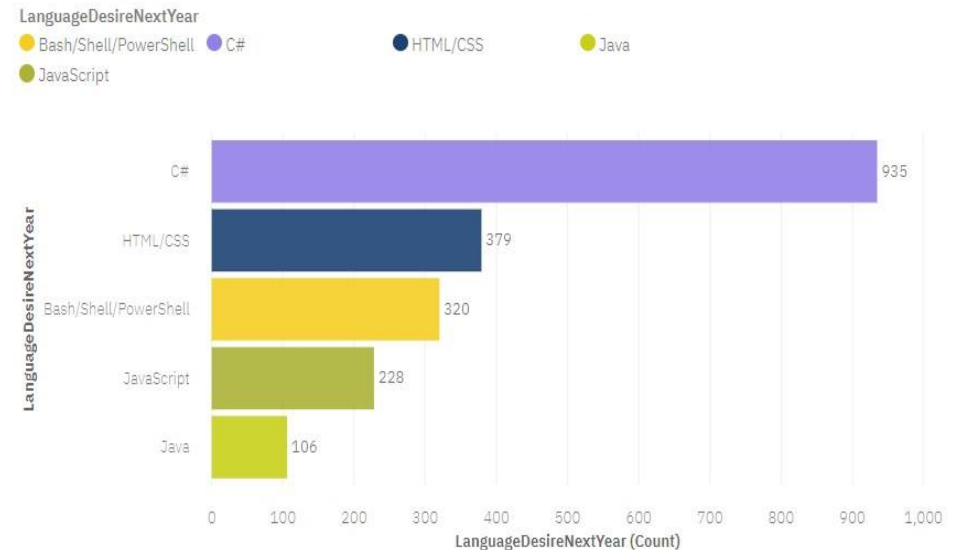
Current Year

Top 5 Language Worked With



Next Year

Top 5 Language Desired Next Year



PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

Findings

- JavaScript, HTML/CSS & SQL – top 3 languages
- Python and TypeScript trending up
- Bash/Shell trending down

Implications

- Continue resources into top languages
- Additional resources may be needed for trending up
- May remove resources from less popular languages

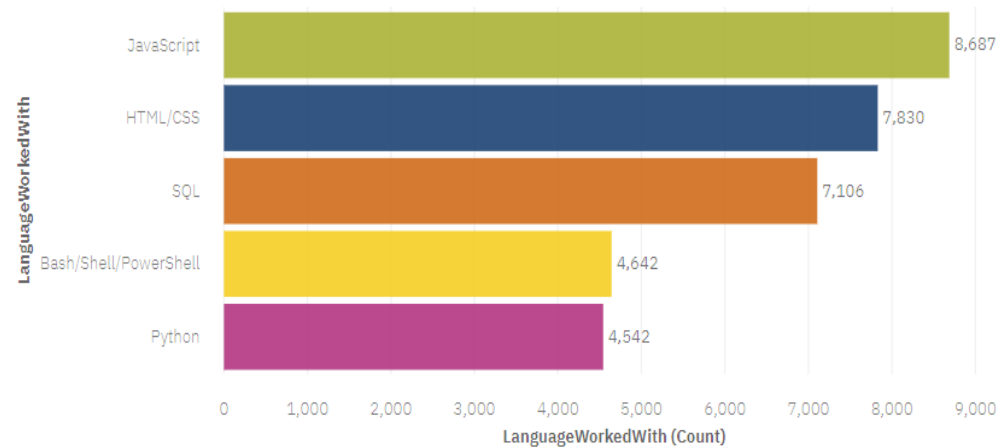
DATABASE TRENDS

Current Year

Top 5 Language Worked With

LanguageWorkedWith

● Bash/Shell/PowerShell ● HTML/CSS ● JavaScript ● Python ● SQL

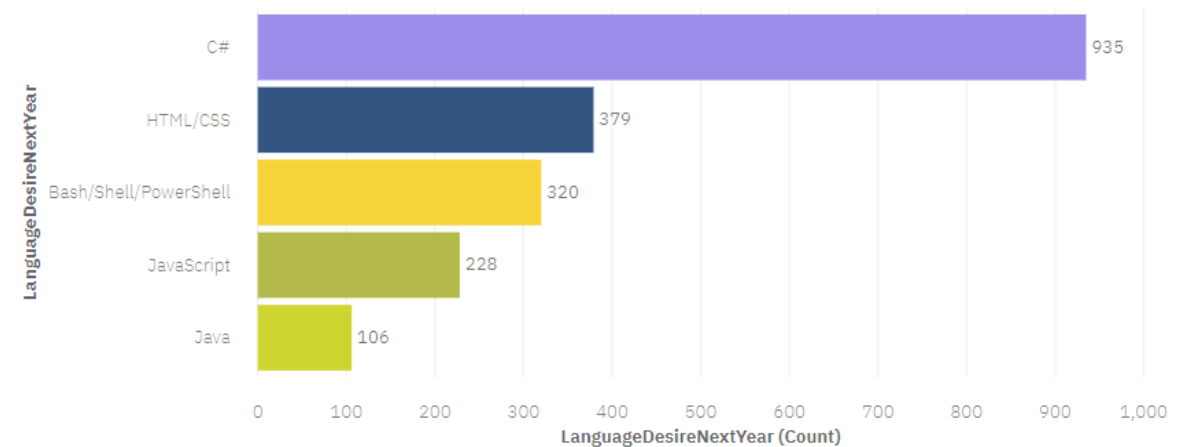


Next Year

Top 5 Language Desired Next Year

LanguageDesireNextYear

● Bash/Shell/PowerShell ● C# ● HTML/CSS ● Java ● JavaScript



DATABASE TRENDS - FINDINGS & IMPLICATIONS

Findings

- MySQL most popular database
- MongoDB and Redis – Trending up
- Sqlite – Trending down

Implications

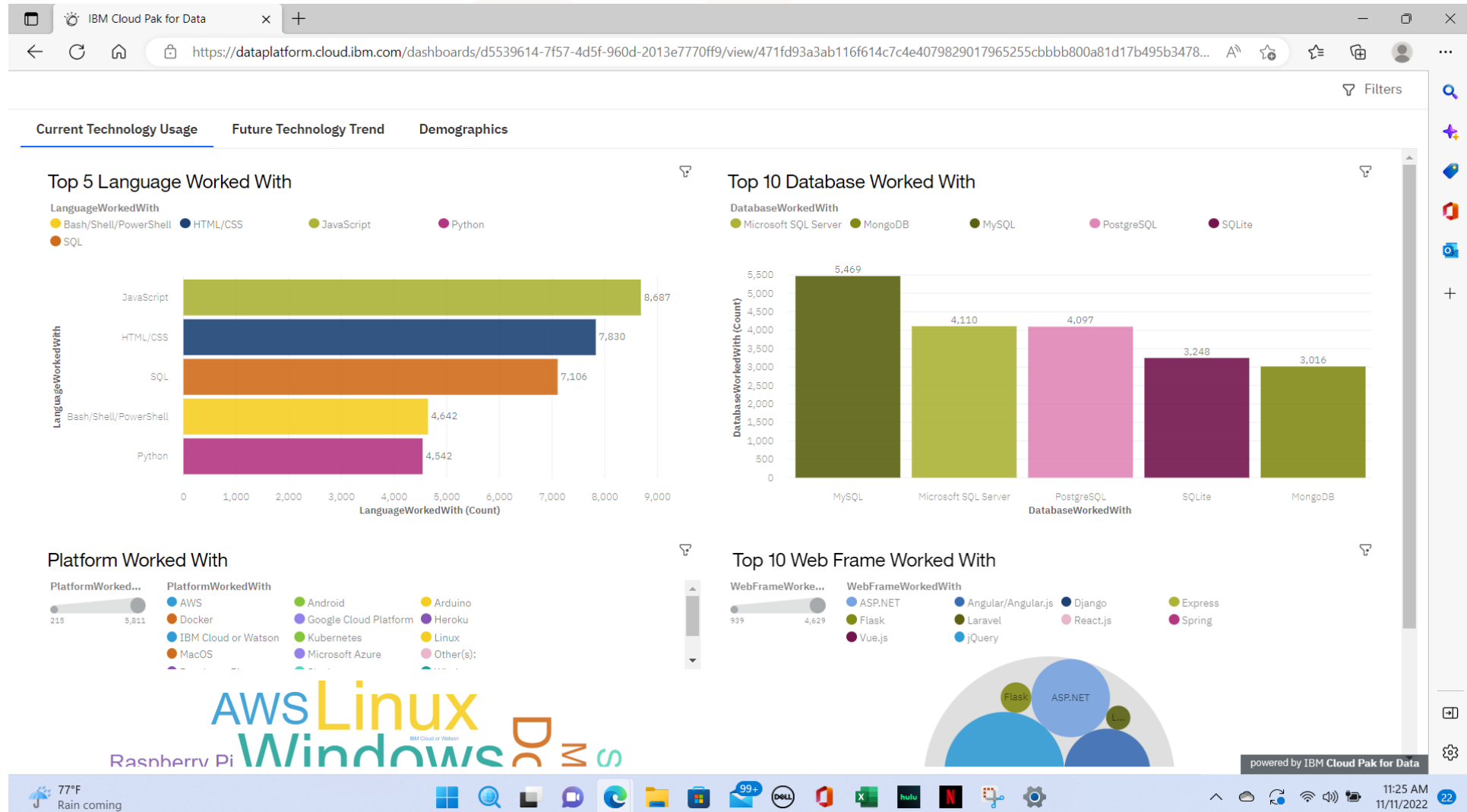
- JavaScript losing popularity, but still at top 5
- NoSQL gaining popularity
- Elasticsearch predictions to become popular

DASHBOARD

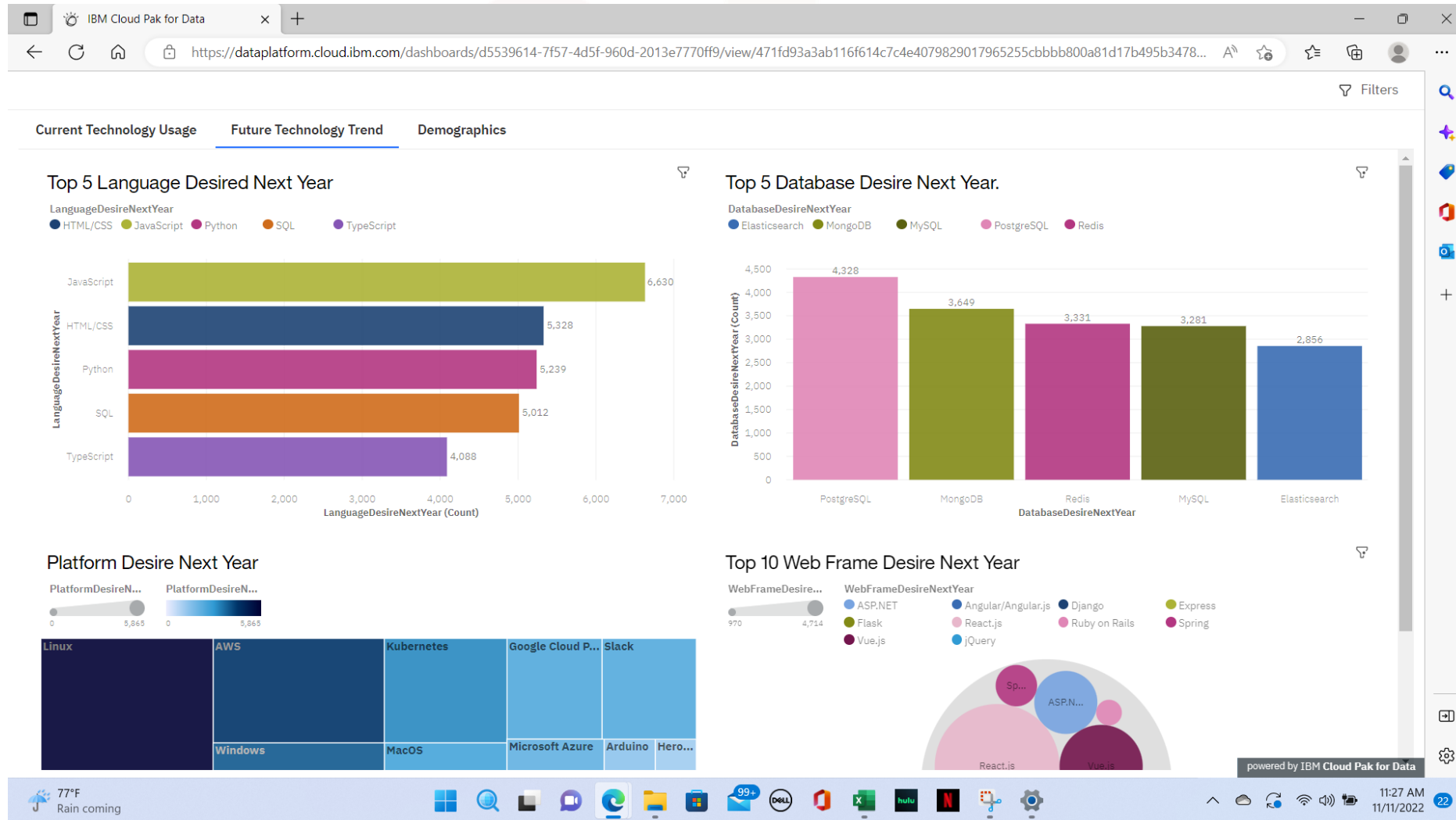


[IBM Cloud Pak for Data](#)

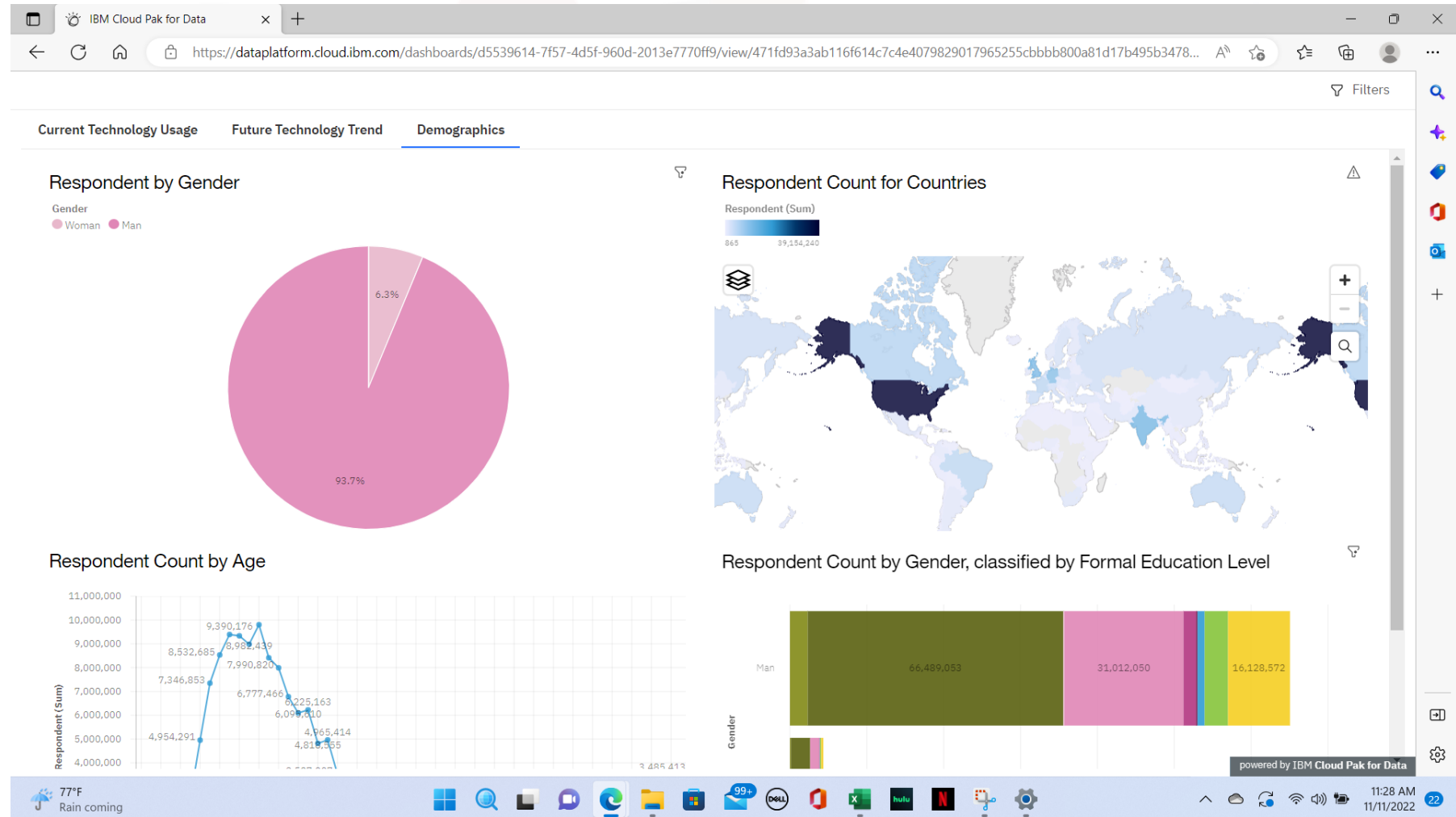
DASHBOARD TAB 1



DASHBOARD TAB 2



DASHBOARD TAB 3

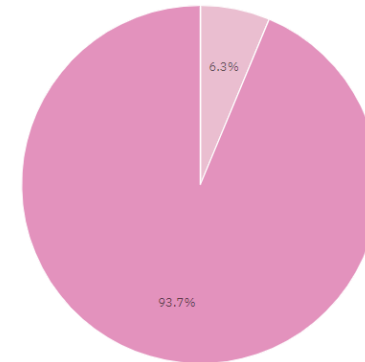


DISCUSSION

What does this data tell us?

Respondent by Gender

Gender
● Woman ● Man



OVERALL FINDINGS & IMPLICATIONS

Findings

- Most popular languages are web based
- Non-relational databases are gaining popularity
- Gender gap in tech industry

Implications

- Developers need to be flexible
- Impact on jobs available
- More semi-structured and unstructured data being analyzed

CONCLUSION



- Cloud-based service is the right direction for IT investment
- Important to be well versed in web languages
- React.js is the future
- There is a huge gender gap in Tech

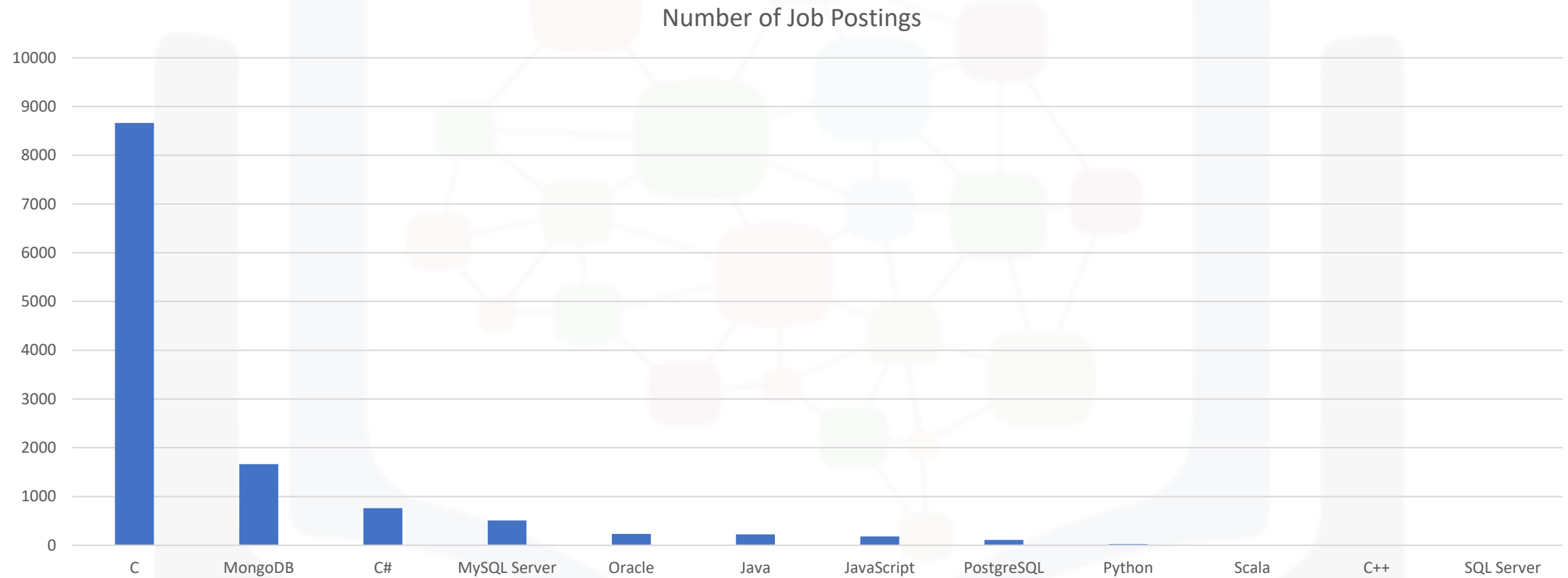
APPENDIX



	Technology	Los Angeles	New York	San Francisco	Washington DC	Seattle	Austin	Detroit
0	C	296	1622	214	2664	1668	224	1973
1	C#	5	41	3	68	49	5	60
2	C++	3	43	3	55	41	4	32
3	Java	43	326	38	516	354	32	353
4	JavaScript	7	51	7	61	52	5	41
5	Python	24	143	17	258	133	15	170
6	Scala	0	8	0	3	4	1	5
7	Oracle	17	95	19	143	110	11	115
8	SQL Server	3	36	2	53	31	5	34
9	MySQL Server	0	0	0	0	0	0	0
10	PostgreSQL	0	1	0	3	1	0	2
11	MongoDB	2	25	2	32	21	1	25

		Language	Average Annual Salary
1	1	Python	\$114,383
2	2	Java	\$101,013
3	3	R	\$92,037
4	4	Javascript	\$110,981
5	5	Swift	\$130,801
6	6	C++	\$113,865
7	7	C#	\$88,726
8	8	PHP	\$84,727
9	9	SQL	\$84,793
10	10	Go	\$94,082

JOB POSTINGS



POPULAR LANGUAGES

