**CHAPTER 7**

**CONCLUSION & FUTURE WORK**

**7.1 Conclusion**

I categorize my conclusions into following in which I discuss my findings and implications one by one.

**Programming Languages Trends:**

**Chart, bar chart

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**Figure 7.1 Comparison of Current and Future trends in Programming Languages**

**IMPLICATIONS**

* **Python’s increase in demand may overtake JavaScript in the future.**
* **JavaScript, Python, HTML/CSS, and SQL are consistently in demand.**
* **Web development remains in high demand.**

**FINDINGS**

* **JavaScript is the most in demand programming language**
* **Python, HTML/CSS, and SQL are other in demand programming languages**
* **Skills in TypeScript is more desirable than Bash/Shell/PowerShell for next year.**

**Databases Trends:**

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**Figure 7.1 Comparison of Current and Future trends in Databases**

**IMPLICATIONS**

**• PostgreSQL and MongoDB are the most consistent in demand databases**

**• Open-source databases are preferred**

**• Demand is volatile**

**FINDINGS**

**• PostgreSQL and MongoDB have an increase in demand**

**• MySQL has a decrease in demand for next year**

**• Skills in Redis and Elastic Search are more desirable than Microsoft SQL Server and SQLite for next year**

**Overall Findings and Implications:**

**IMPLICATIONS**

**• IT professionals and companies have to learn and adapt to new demands**

**• Having skills that are high in demand leads to more job opportunities**

**• Gender gap will affect job hiring trend**

**FINDINGS**

**• Trends and demands fluctuate based on new technologies**

**• JavaScript and Python are the most popular programming languages**

**• Gender bias & gap in the IT field**

**Conclusion:**

**• The IT industry needs to diversify**

**• New technology leads to different trends and demands**

**• JavaScript and Python are the most popular programming languages**

**• PostgreSQL is the most popular databases**

**References:**

* **Python** Link: [https://www.python.org](https://www.python.org/)
* **Pandas** Link: <https://pandas.pydata.org>
* **NumPy** Link: <https://numpy.org>
* **Matplotlib** Link: [https://matplotlib.org](https://www.python.org/)
* **Dash** https://dash.plotly.com/
* **Scikit-learn** Link: <https://scikit-learn.org/stable/.org>
* **Plotly** Link: https://plotly.com/python/
* **Folium** Link: <http://python-visualization.github.io/folium/>
* **Jupyter Notebook**

Link: https://jupyter.org/

* **Dash Bootsrap** Link: <https://dash-bootstrap-components.opensource.faculty.ai/>
* <https://www.ibm.com/cloud/learn/machine-learning>
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