

The field I am interested in is business analytics, which involves the combination of management, computer science, and business. Computer science is an integral part of this field, and numerous skills and softwares are utilized in business analytics. For instance, statistical analysis softwares such as R, SAS, SPSS, or STATA. These softwares are used for normal and multivariate analysis. Another language used is SQL, or structured query language, which is used for the creation and manipulation of databases. Because business analysts use and work with databases frequently, SQL makes it possible to add and change data within the databases. Moreover, Python and R are integral to this field as well, as R involves statistical tools and Python works well with large datasets and AI.

In business analytics, businesses use descriptive, predictive, and prescriptive analytics. These forms of analytics and data allow for businesses and analysts to analyze past, future, and current data to help with the decision making process. With computer programming languages including SQL, Python, and R, which are commonly used in this field, analyzing this type of data is possible. In terms of the users of business analytics and these programming languages, the analysts use them to manipulate and access the data. This helps all sectors of the businesses, including IT, HR, marketing, and customer service.

I wish to work as a business analyst, and I know this position requires the usage of computing skills including SQL, R, and Python, all of which are essential to the analysis of the business' decisions and strategies. For instance, data can be analyzed in the business' marketing department to see which products are selling and which products have the potential to sell through looking through customer databases. This provides valuable information to the business and allows them to deduce which steps they should take to help with growth.

In terms of specific ways computer languages are used in the field of business analytics, R is used to make analytical models and to build custom data collection. R also has a ggplot 2 package, which is useful for visualizations. Python is used to organize, describe, and sort existing data. Python allows for exploratory data analysis, in which results are able to be visualized and observations are able to be created based on the existing data. SQL is useful for managing and creating data in relational databases. Analysis can also be conducted through this versatile programming language.

Overall, computer science in the field of business analytics is utilized through the use of languages such as R, SQL, and Python. These languages are used because of their versatility and ability to manage databases to help conduct various analyses. Computer science is used when business analysts need to conduct visualizations, analyses, and analytical models. Computer science is integral to the business analytics field, and is useful for many aspects in this job.