DATA ANALYST

TEAM 1140A

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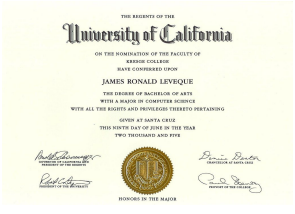
The STEM field is very competitive yet has very rewarding career opportunities such as data analysis. A data analyst's job is to organize, collect and interpret statistical information and discover how the data can be used to answer questions and solve problems. You may have heard the term "Data Science" before, but data analysis is completely different. Even though they both involve data, data analysts examine large data sets to identify trends that help businesses make better strategic decisions e.g. why sales dropped in a certain quarter, or why a marketing campaign fared better in certain regions. etc. Data scientists, however, create new processes for data modelling and algorithms for custom analysis. More specifically, a day in the life of a data analyst consists of being included in everything from setting up an analytics system to providing insights based on the data collected—you may even be asked to train others to use your data-collection system. The common responsibilities of this career include producing reports, spotting patterns in the dataset, and collaborating with other departments.

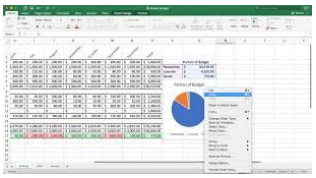
The effect that Vex IQ has on my career path is giving me skills that are useful for this particular job and every-day life. For instance, building our robots requires the use of problem-solving skills to find adaptations that can be made to improve on robots. Communication skills in Vex IQ is also important. Without communication, teams wouldn't be able to coordinate in real life which also applies when working with other departments in the company you work for as a data analyst. For projects such as the STEM challenge, presentation skills are key to captivate the judges, as well as clients whom you would present the statistics to. The last skill that VEX IQ teaches you is time management skills; when to practice teamwork matches, autonomous programming, as well as the design notebook. When working in a competitive environment, time management is also a useful skill in order to balance different projects for different companies/clients. The predicted job growth for this profession is that freelancers are expected to make up fifty percent of the entire workforce, but the word "data analyst" would serve as the umbrella label for a number of new, specialised data-related occupations in 2030, such as IoT computer data analytics, drones, genetic engineering, nutrition and more. The known period of development of data analytics is defined in phases: from descriptive (what happened) to diagnostic (why it happened), to exploration (what we can learn from it), to predictive (what is likely to happen), and finally to prescriptive analytics (what action is best to take).

In order to become a data analyst, you first must hold a bachelor's degree in a field centered around mathematical and analytical abilities, such as statistics or computer science. From there, you must learn important data analytics skills as well as achieve certification in the study. Soon after, you should be able to find your first entry-level data analyst job to have on the side while earning a master's degree in data analytics if you want to be successful in the profession. Some of the best



Universities in Canada that offer data analyst courses consist of The G. Raymond Chang School of Continuing Education, Ryerson University, York University School of Continuing Studies, and the University of Toronto School of Continuing Studies.

There are many skills required/encouraged to have when applying for data analysis jobs. The main key points include statistics, management, spreadsheets, and public speaking. Statistics are a needed ability when working with large data sets, for example, spreadsheets are used to process a large amount of information and compress it into the main key points. Programming languages such as Python are also welcome to prepare them for the tools their company has to offer. Usually data analysts typically need to share their findings with the company, and so making easy-to-understand data analysis visualization is crucial. Often, data analysts also prefer to use visuals like graphs or charts to help their peers understand easily and clearly what the data means. It is also an essential part of the job to present data. In addition to clearly compiling their results, data analysts must also clarify verbally and in writing why the information is relevant and what the corporation can do with the findings. Management also provides oversight of all components of a project, including the members of the team and their jobs. A community of other analysts or IT personnel is regularly managed by some analysts. Based on data analysis, they may need to assess solutions to technical problems or test new processes. Both of these objectives require knowledge or alternative solutions for research.



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