NGallo_LFN1 Task 2 Careers and Career Goals_A

A. Create a career plan.
   1. Describe **three** different roles or careers in data analytics.
      a. Discuss the differences between the roles or careers from part A1.
   2. Describe how *each* role from part A1 supports the data analytics life cycle.

There are a variety of different roles in the data analytics field, but three prominent roles are data analysts, data engineers, and data scientists.

A data analyst is primarily responsible for collecting, cleaning, and analyzing datasets. They work to provide actionable insights and identify data-driven decisions. This role involves using tools and techniques like SQL and Tableau to note any trends and communicate findings to stakeholders.

A data engineer focuses on designing, building, and maintaining the infrastructure that supports data processing, storage, and retrieval. They work with large volumes of data to ensure it is accessible, reliable, and ready for analysis. Their knowledge is in database management, ETL processes, and cloud technologies.

A data scientist is a professional who uses statistical, machine learning, and programming skills to analyze and interpret complex datasets. They also develop and deploy predictive models and algorithms that contribute to solving business problems. Data scientists are known to leverage both engineering and programming skills to deliver recommendations to stakeholders.

The main differences between data analysts, data engineers, and data scientists are their skill sets and expected deliverables to the stakeholders. An analyst is interpreting and visualizing data. An engineer is ensuring the data flows smoothly from source to storage. A scientist is utilizing machine learning and predictive modeling to forecast trends. While they all have their specific purpose when it comes to data, they each provide important skills and expertise to the field.

Each of these three roles supports the data analytics life cycle in its own specific way.

Data analysts are consistently involved throughout the seven phases; however, they shine the most in the data exploration and reporting phases. These two phases are when the analyst will extract insights, identify patterns, and communicate the findings to stakeholders with reports and visualizations. Data engineers are mostly needed in the beginning phases such as data acquisition and data cleaning. This is when the data engineer will collect, store, and prepare the data for the analyst. Data scientists' roles are contributed throughout the

life cycle; however, they are most involved in the predictive modeling and data mining phases. This is where the scientist will use tools like Python and R for automation and machine learning purposes.

Each profession in the data analytics life cycle plays an important role and works together towards the common goal.

NGallo_LFN1 Task 2 Careers and Career Goals_B

B. Compare **three** different data analytics disciplines as described by ProjectPro.
    1. Identify **three** types of careers from the Bureau of Labor and Statistics government data in your career plan.
    2. Identify your academic skills and needs for the careers considered in part B1.

According to ProjectPro, there are a variety of different types of data analytics disciplines to choose from. As someone who is pursuing data science, I sought out three related careers that complement the skills of a data scientist.

Operation research consists of decision-making and optimization of projects such as pricing, inventory, and supply chain. An operation research analyst is similar to a data scientist because of the algorithms an analyst creates and applies to data. The skills needed for this role include the same roles needed to be a data scientist which include analytics skills, critical-thinking skills, problem-solving skills, and more.

Statistics is a part of mathematics that can help develop models and statistical techniques on huge unstructured datasets. Statisticians can relate to a data scientist because of the statistics needed for predictive models in data. The skills needed for this role include analytical skills, math skills, logical thinking skills, and more.

Computer science and data science do have some overlap when it comes to their roles. Computer science can include software developers working on algorithmic and complex computational implementations. While a computer scientist or software developer mostly focuses on programming and building software and tools, a data scientist can also program in languages like Python or R to solve data problems. The skills needed in computer science are creativity, detail-oriented, problem-solving skills, and more.

NGallo_LFN1 Task 2 Careers and Career Goals_C

C. Identify a potential career goal in your career plan based on your strengths and academic/MSDA track interests.
    1. Reflect on your career strengths as identified in your personalized CliftonStrengths assessment results.

CliftonStrengths® Top 5 for Nicole Gallo

This report presents your five most dominant CliftonStrengths revealed by your responses to the CliftonStrengths assessment. Use this report to learn more about these strengths, how they uniquely show up in your life and how you can use them to fulfill your potential.

1. Relator®

You enjoy close relationships with others. You find deep satisfaction in working hard with friends to achieve a goal.

2. Empathy®

You can sense other people's feelings by imagining yourself in others' lives or situations.

3. Input®

You have a need to collect and archive. You may accumulate information, ideas, artifacts or even relationships.

4. Intellection®

You are characterized by your intellectual activity. You are introspective and appreciate intellectual discussions.

5. Responsibility®

You take psychological ownership of what you say you will do. You are committed to stable values such as honesty and loyalty.

EXECUTING themes help you make things happen.

INFLUENCING themes help you take charge, speak up and make sure others are heard.

RELATIONSHIP BUILDING themes help you build strong relationships that hold a team together.

STRATEGIC THINKING themes help you absorb and analyze information that informs better decisions.

As I reflect on my CliftonStrengths assessment results (Relator, Empathy, Input, Intellection, and Responsibility), I see a clear alignment with my goal of becoming a data scientist. My goal is to not only analyze data but also fill the gaps between analytics and how they impact real-world situations in everyday life.

Relator
I enjoy building deep, trusting relationships and collaborating closely with others to achieve shared goals. As an aspiring data scientist, I believe this strength will help me work effectively with cross-functional teams and understand the goals of the stakeholders and project.

Empathy

I believe I have a strong ability to sense and understand the feelings and perspectives of others. This allows me to hear concerns, incorporate my communication, and ensure that my findings are relevant to a wide range of audiences.

Input

My curiosity encourages me to constantly gather information. This supports my desire to stay up to date with the latest trends and analytical methods. I believe this will be an invaluable trait as I continue to grow as a data scientist.

Intellection

I thoroughly enjoy deep thinking and reflection, which excites me to handle complex analytical challenges and develop innovative solutions. Thoughtful interpretation of data is critical in the data analytics world, and I hope I can apply this strength to solve real problems in my community.

Responsibility

I take ownership of my work and am committed to delivering high-quality results. I believe trust is essential in this field and I am confident that my sense of responsibility will make me a dependable teammate on any project.

By learning and leveraging my top 5 CliftonStrengths, I'm eager to practice and grow these strengths to become a better teammate and well-rounded individual as an aspiring data scientist.