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LIS 4934: BSIS Senior Capstone

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BSIS Program Overview 1:

My major at the University of South Florida is Information Science with a concentration in data science and analytics. I will be graduating with this degree on December 13 as I will enter a new chapter as a USF graduate. I am going to discuss my current courses this last semester and my previous semesters at USF. I am currently enrolled in COP 2250 (Object Oriented Programming Java SE), LIS 4805 (Predictive Analytics), and LIS 4934 (BSIS Senior Capstone). According to the degree requirements, I need to take 39 credits for my degree program which is split into two sections. The two sections are the 21 credits for the core courses and 18 credits for the data science/analytics concentration courses.

LIS 4800 (Introduction to Data Science)

LIS 4800 is the introductory course in data science and analytics. This course provides an overview of working with large sets of data as it pertains to collection, organization, and visualization of data. This course is extremely important for an information science major because we must collect and analyze data using the R programming language. LIS 4800 serves as the first course taken in data science and analytics concentration as it is important to understand the concepts before taking other LIS courses.

LIS 3261 (Introduction to Information Science)

LIS 3261 is the introductory course for information science majors. This course discusses the foundational concepts of discipline, history, and core theories of information science. It is

important for an information science major to take this course because information is to be collected and used for drafting papers and doing research on a computer. This course takes us week by week to understand basic information technology concepts and real-life scenarios on how to work with information.

LIS 4761 (Introduction to Data Texting & Mining)

LIS 4761 is one of the important courses to take if a student is planning to go to graduate school to become a data scientist. Advanced data science and analytics concepts are taught because LIS 4800 (Introduction to Data Science), LIS 4273 (R Programming), and LIS 4317 (Visual Analytics) are the three main prerequisites to complete with a C or higher. The first few weeks of the course teach students data mining techniques using the R programming language. For example, there are several data types and how each one is used. We created data visualizations and utilized the HTML website to publish our lab work from RMarkdown. My favorite assignment of the data & text mining course is when the class had to create an application using RStudio. The project took about two weeks to complete, and we published it using RShiny. RShiny is a web application used when testing the created application.

LIS 4805 (Predictive Analytics):

The LIS 4805 course is the last concentration course an information science student takes due to the intensity of the assignments and understanding new topics for graduate school. I am currently learning about machine learning algorithms, predictive analytics probabilities, and future trends using statistical algorithms. This course is extremely important for graduate programs because advanced machine learning concepts are taught if a student demonstrates mastery of the material in the data science concentration courses. Concepts in data mining are still being used as it is still important to apply the skills learning in LIS 4761.

LIS 4934: (BSIS Senior Capstone)

This course is the final course of the Bachelor of Science degree in information science. Students are expected to apply everything learned in the information science major by creating a portfolio for future jobs and graduate school applications. For example, the autobiography project is one of the first assignments to complete as I had to provide a brief introduction about my major.

Creating a portfolio is extremely important in the career of information science, because most information science careers require recent graduates to submit a portfolio of coursework projects and research papers. For example, my favorite part of this course is creating a portfolio of what I did throughout my undergraduate education. I also submitted my unfinished portfolio to my LinkedIn page for employers and recent college graduates to see.

Overall, these courses prepared and helped me understand the career of information science.

During my free time outside of classes, I utilize the skills learned and practiced statistical programming skills required for my career. I will continue with networking on LinkedIn, taking relevant certification courses, and to update my e-portfolio since I did not have any internship experience. These five courses in the information science major were the most important to me as I do plan to apply for graduate school in the future. I plan to take a few gap years from graduate school to gain professional experience.