PORTFOLIO MILESTONE DRAFT

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Introduction

Hello and welcome! My name is Vladimir Dinolov and I'm currently living in Dallas, Texas as an educator turned data professional. I have been working in data science and analytics for almost 2 years. In my previous career, I was a high performing educator ranked in the top 1% of 10,000 teachers in the Dallas-Fort Worth Area. I was then given the title 'Master Teacher' by the Texas Education Agency Commissioner. My success in the classroom led me to apply that same work ethic to becoming a data professional, pursuing my M.S. in Applied Data Science. This program has given me the necessary skills and competencies to transition from public education to data science.

As I reflect on my experience in this program, I remember how I entered it with little to no understanding of data infrastructure, programming, or predictive analytics. Through struggle, iteration, and many all-nighters, I can proudly say I've grown as a professional and successfully transitioned to a new career as a Data Analyst. This program presented me with many opportunities to tackle complex, multi-industry projects with a data science toolkit. I will continue to build and grow this toolkit to solve novel data problems.

I'm looking forward to sharing my academic journey with you as part of this portfolio. This milestone is structured around the program's core competencies, as seen below:

Insert core competency to class/project diagram

Describe a broad overview of the major practice areas of data science

Data science is a unique, interdisciplinary field that requires foundational knowledge and skills, like statistics, but also requires practitioners to constantly improve in response to a technology landscape in flux. According to my Intro to Data Science course, a successful data scientist should have a strong background in the "collection, preparation, analysis, visualization, management, and preservation of large collections of information". The artifacts in this portfolio will showcase this data science process and highlight how each was used to varying degrees.

Collect and Organize Data

Insert project TBD

This section will outline the collection and organization of data, more than likely using an example from the Database Administration course or from Big Data Analytics.

Identify patterns in data via visualization, statistical analysis, and data mining

This section will more than likely cover the project "Erasing the Opportunity Gap in NYC Public Schools", which can be found in my portfolio here. I will elaborate on how R and Adobe Illustrator were used to describe and visually represent the data. The visualization I will review is here. I may also incorporate other projects where feature engineering (data mining) led to a new discovery in the data.

Develop alternative strategies based on the data

I have the perfect project for this section but it is still a work in progress. The project will be from Big Data Analytics, a course I'm completing this term. It requires me to make a recommendation to my company's marketing team on how to engage our customers based on many different variables. So, I expect to have at least three or more alternative strategies based on the type of customer we are engaging and the marketing channel we are using to engage that customer.

Develop a plan of action to implement the business decisions derived from the analyses

The project mentioned above will also be used to for this section, possibly with other projects as well. Since we are making a recommendation to my company, we will more than likely provide a 'marketing strategy plan' for the how, when, where, why, and who of the recommendations.

Demonstrate communication skills regarding data and its analysis for relevant professionals

This section will consist of the aforementioned marketing project, but also examples from the Data Analytics class, where I collaborated with a team to engage a colleague's employer's decision-makers. We presented them with a summary of our report which outlines how to optimize energy outages for their hydroelectric dams. That project can be found here.

Synthesize the ethical dimensions of data science practice

I have not decided on which artifact(s) to use an example for this core competency. However, the NYDOE public education project from a previous session might be a good choice. This section provides a great opportunity to highlight what data science for social impact looks like and how to avoid biases or misinterpretations of variables, insights, and the populations those variables and insights affect.

Closing Out

As I mentioned earlier, I'm grateful for the opportunity to develop new, foundational skills that will allow me to grow in both my career and life. This program has helped improve my data literacy and understand how, when, and why to apply my newfound toolkit. I now know how to collect, prepare, analyze, visualize, manage, and preserve data with increased confidence and a deeper understanding. I am excited to apply these techniques in my final course in the program and throughout my career moving forward.