

**Final Exam**

**CTS2451**

**Dr. Lee**

Identify a dataset that speaks to your passion. The dataset must be reputable and include a data dictionary. Sources include:

<https://kaggle.com>

<https://ernesto.net/datasets/>

<https://opendata.dc.gov/>

<https://data.gov/>

<https://www1.nyc.gov/site/nypd/stats/reports-analysis/stopfrisk.page>

Or ANY DATASET THAT IS REPUTABLE.

You are to create a 2-4 page paper with APA citations and a PowerBI Dashboard. Identify a dataset and propose a business problem, hypothesis and assumptions. Follow the steps below and have your paper describe each of the steps with at least a paragraph. Feel free to include visuals, however, they do not count towards the 2-4 page required length. You are to submit your paper as well as the associated .pbix.

1. Clean transform and load your data (can be done in Excel or Power BI)
2. Generate at least 1 calculated column and measure (DAX).
3. Design a data model (either Star Schema or Snowflake Schema)
4. Perform an Exploratory Data Analysis on your dataset. Generate at least 2 insights from:
   1. Univariate Analysis
   2. Bivariate Analsysis
   3. Multivariate Analysis

These insights should be the showcase of your report and dashboard and should address your business questions, hypothesis and assumptions.

1. Create reports and a single Dashboard based on your data model and analysis that makes a compelling and effective case that your analysis answers your business question. (More is not always better.)