**Mod8: Portfolio Project**

**Data Analysis Outcomes**

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MIS581: Capstone – Business Intelligence and Data Analytics

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**Datasets may be downloaded from healthdata.gov within the following locations:**

1. US Department of Health and Human Services (2023) *COVID-19 Reported Patient Impact and Hospital Capacity by Facility* [Data set]. <https://healthdata.gov/Hospital/COVID-19-Reported-Patient-Impact-and-Hospital-Capa/anag-cw7u>
2. Centers for Disease Control and Prevention (2023) *COVID-19 Vaccinations in the United States, County* [Data set]. https://healthdata.gov/dataset/COVID-19-Vaccinations-in-the-United-States-County/ipdn-uaih

**Data Analysis Outcomes using SAS Studio:**

## **Hospital Capacity Summary Statistics**

Graphical user interface, table

Description automatically generatedGraphical user interface, text, application

Description automatically generated**Figure 1:** *CA Summary Statistics*  **Figure 2:** *FL Summary Statistics*

Text

Description automatically generated with medium confidenceGraphical user interface, text, application

Description automatically generated**Figure 3:** *NY Summary Statistics* **Figure 4:** *TX Summary Statistics*

# **Hospital Capacity Dataset Histograms and Boxplots**

**Figure 5:** *Distributions of Available* **Figure 6**: *Distributions of Inpatient*

*Inpatient Beds per State*  *Beds Used per State*

Chart, histogram

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Description automatically generatedChart, histogram

Description automatically generatedText

Description automatically generated with low confidenceChart, histogram

Description automatically generatedChart, histogram

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Description automatically generatedChart, histogram

Description automatically generated

**Figure 7**: *Distribution of IBUR per State* **Figure 8:** *Distribution of Hospitalized Adult*

*COVID Patients per State*Graphical user interface, text, application

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Description automatically generatedChart, histogram

Description automatically generatedGraphical user interface, text, application

Description automatically generatedChart

Description automatically generated with medium confidenceHistogram

Description automatically generated with low confidenceChart, histogram

Description automatically generatedChart, histogram

Description automatically generated

## **Hospital Capacity Dataset Time Regression Analysis**

Table

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Description automatically generated**Figure 9:** *CA’s IBUR Time Regression Analysis* **Figure 10:** *FL’s IBUR Time Regression Analysis*

Graphical user interface, chart

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Description automatically generated

Table

Description automatically generatedGraphical user interface, chart, scatter chart

Description automatically generated**Figure 11:** *NY’s IBUR Time Regression Analysis* **Figure 12:** *TX’s IBUR Time Regression Analysis*

Table

Description automatically generatedGraphical user interface

Description automatically generated with medium confidence

**Figure 13:** *CA’s Hospitalized COVID Cases* **Figure 14:** *FL’s Hospitalized COVID Cases Time*

*Regression Analysis Time Regression Analysis*

Table

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Graphical user interface, chart

Description automatically generatedGraphical user interface, chart

Description automatically generated

**Figure 15:** *NY’s Hospitalized COVID Cases* **Figure 16:** *TX’s Hospitalized COVID Cases Time*

Table

Description automatically generated *Regression Analysis Time Regression Analysis* Graphical user interface, application

Description automatically generatedGraphical user interface, chart

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Description automatically generated

## **Hospital Capacity ANOVA Studies**

**Figure 17:** *One Way Analysis of Variance (ANOVA) for IBUR*

Graphical user interface, application, table

Description automatically generatedTable

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Description automatically generated

Table

Description automatically generatedGraphical user interface

Description automatically generated with medium confidence**Figure 18:** *One Way Analysis of Variance (ANOVA) for Total Hospitalized COVID Adult Patients*

Chart

Description automatically generated

## **Vaccinations Dataset Summary Statistics, Histograms, and Boxplots**

**Figure 19:** *Vaccination Rate Summary* **Figure 20:** *Distribution of Vaccination*

Graphical user interface

Description automatically generated*Statistics for CA, FL, NY, and TX* *Rate per State*

Chart, histogram

Description automatically generatedChart, histogram

Description automatically generatedChart, histogram

Description automatically generatedChart, histogram

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## **Vaccinations Dataset Time Regression Analysis**

**Figure 21:** *CA’s Vaccination Rate Time* **Figure 22:** *FL’s Hospitalized COVID Cases Time*

*Regression Analysis Time Regression Analysis*

Table

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Description automatically generatedChart

Description automatically generated

**Figure 23:** *NY’s Vaccination Rate Time* **Figure 24:** *TX’s Hospitalized COVID Cases Time*

*Regression Analysis Time Regression Analysis*

Chart, scatter chart

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Description automatically generatedGraphical user interface, chart

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Description automatically generated

## **Vaccination Dataset ANOVA Study**

**Figure 25:** *One Way Analysis of Variance (ANOVA) for Total Hospitalized COVID Adult Patients*

Table

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