IS201 Lecture Notes – Session 19  
Tableau Forecasts, Excel Solver

Brandt Redd – 2020-03-18

# Setup

* Pause and then restart the recording.
* Open chat and participants windows.

# Tableau Analysis of COVID-19 Data

COVID-19 Data: <https://brandtredd.org/files/IS201/COVID-19-data>

Johns Hopkins Visualizations: <https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Tableau COVID-19 Page: <https://www.tableau.com/covid-19-coronavirus-data-resources>

# Show US Data

* New Tableau Tab
* Date to Columns
* Change to Daily
* Confirmed to Rows
* Country/Region to Filters
* Filter to US

# Forecast

* Click on Analytics Tab (Upper Left)
* Select Forecast and drag onto the graph
* To customize: Right click on graph (in the view) – Forecast Options
  + Change interval to three months.
* This is a generic forecasting model. There are epidemiological models that do a much better job.

# Using Excel

* Load COVID-19
* Filter by Country – US
* Date to Rows
* Confirmed to Columns
* Deaths to Columns
* Right-click one date
* Select Group and select date
* Create the graph

# Enable Solver and Data Analysis

* File-Options-Add-Ins
* Manage Excel Add-Ins – Go
* Enable Solver and Data Analysis

# Solver in Excel

* Load TP-R-Us
* Invoke the Solver
* Maximize $C$12
* By Changing $C$15
* Constraint: $C$15 <= $C$20
* Experiment with different cost models

# If Time – Return to Tableau For More Analytics

# Symbol Map

* ProvinceState to Columns
* Confirmed to Rows
* CountryRegion to Filters
  + Filter to just US
* Show Me – Symbol Map
* Also try switching to Filled Map

# Highlighted Table

* CountryRegion to Rows
* Confirmed to Columns
* Switch to Highlight Table
* Hover to right of Country Region and sort by Confirmed
* Click Color – Quick Calculation – Rank
* Change Sort to Alphabetic
* Click Color – Edit Colors – Reversed to make highest rank the darkest

# Side-By-Side Chart