**Tableau Tutorial**

**Overview**

This is a tutorial summary that will introduce and guide you form the basic concepts before using tableau through how to create a story to present to your audiences. Please email [tianzhang@email.arizona.edu](mailto:tianzhang@email.arizona.edu) for questions or suggestions.

**Download Tableau**

Register your student account and activate it by uploading required material at <https://www.tableau.com/academic/students>. You will then receive a verification status email from tableau. Use the link and product key provided to download and activate your Tableau software.

**Think what you want first**

Before analyzing data, think about: Who you are presenting to? what do you need your audience to know or do? How will you communicate to your audience?

Read [Find Good Data Sets](https://help.tableau.com/current/pro/desktop/en-us/find_good_datasets.htm) to see if your data will satisfy your analyzing needs.

**Recommended data sources**

[CDC Data & Statistics](https://www.cdc.gov/DataStatistics/) [Kaggle](https://www.kaggle.com/) [Data.gov](https://www.data.gov/) [US Census](https://www.census.gov/data.html) [Open Movie Data Base](http://www.omdbapi.com/)

**Data preprocessing**

Data preprocessing is an essential part for data visualization to make your analysis precise and trustworthy

Read [Top ten ways to clean your data](https://support.microsoft.com/en-us/office/top-ten-ways-to-clean-your-data-2844b620-677c-47a7-ac3e-c2e157d1db19) to clean your data in Excel

Read [Clean and Shape Data](https://help.tableau.com/current/prep/en-us/prep_clean.htm) to clean your data within Tableau

After cleaning your data, read [Structure Data for Analysis](https://help.tableau.com/current/pro/desktop/en-us/data_structure_for_analysis.htm) to select data type and join type

**Before getting into our analysis**

Know these concepts first to avoid obvious mistakes:

[Dimensions and Measures](https://help.tableau.com/current/pro/desktop/en-us/datafields_typesandroles.htm)

[Choose the Right Chart Type for Your Data](https://help.tableau.com/current/pro/desktop/en-us/what_chart_example.htm)

**Creating a view/sheet**

Now you are all set to get started! Follow [Build a Basic View to Explore Your Data](https://help.tableau.com/current/pro/desktop/en-us/getstarted_buildmanual_ex1basic.htm) to try to build your own view!

**Creating a dashboard**

After you successfully created a couple of views or sheets, you would like to put them into dash boards to present your findings much effectively. Read [Best Practices for Effective Dashboards](https://help.tableau.com/current/pro/desktop/en-us/dashboards_best_practices.htm) to learn how an effective dashboard looks like an follow [Create a Dashboard](https://help.tableau.com/current/pro/desktop/en-us/dashboards_create.htm) to create one yourself.

**Creating a story**

With dashboards you created, fill them into story before presenting it to your audiences or publish it to a website. Follow [Create a Story](https://help.tableau.com/current/pro/desktop/en-us/story_create.htm#fit-a-dashboard-to-a-story) to finish your analysis.

**Extended resources**

[Video - Tableau in Two Minutes](https://www.youtube.com/watch?v=jEgVto5QME8&ab_channel=PenguinAnalytics)

[Video - How to create a story](https://www.youtube.com/watch?v=5TZsOmkqahw&ab_channel=TutorialsPoint%28India%29Ltd.)

[Video - How to create dashboard](https://www.youtube.com/watch?v=Nr31rv9tsJ8&ab_channel=ArtofVisualization)

**References**

<https://www.cdc.gov/DataStatistics/> CDC Data & Statistics

<https://www.kaggle.com/> Kaggle

<https://www.data.gov/> Data.gov

<https://www.census.gov/data.html> US Census

<http://www.omdbapi.com/> Open Movie Database

<https://app.slack.com/client/T019VQ87H7A/C0194NA6V45/files/F01BNB18D7W> MIS561 #3 Importance of Context in Visualization

<https://help.tableau.com/current/pro/desktop/en-us/find_good_datasets.htm> Tableau - Find Good Data Sets

<https://help.tableau.com/current/prep/en-us/prep_clean.htm> Tableau - Clean and Shape Data

<https://support.microsoft.com/en-us/office/top-ten-ways-to-clean-your-data-2844b620-677c-47a7-ac3e-c2e157d1db19>

Microsoft – Top ten ways to clean your data

<https://help.tableau.com/current/pro/desktop/en-us/datafields_typesandroles.htm> Dimensions and Measures

<https://help.tableau.com/current/pro/desktop/en-us/what_chart_example.htm> Choose the Right Chart Type for Your Data

<https://help.tableau.com/current/pro/desktop/en-us/getstarted_buildmanual_ex1basic.htm> Tableau - Build a Basic View to Explore Your Data

<https://help.tableau.com/current/pro/desktop/en-us/dashboards_best_practices.htm> Best Practices for Effective Dashboards

<https://help.tableau.com/current/pro/desktop/en-us/dashboards_create.htm> Create a Dashboard

<https://help.tableau.com/current/pro/desktop/en-us/story_create.htm#fit-a-dashboard-to-a-story> Create a Story

<https://www.youtube.com/watch?v=5TZsOmkqahw&ab_channel=TutorialsPoint%28India%29Ltd>. Youtube - Story Point

<https://www.youtube.com/watch?v=Nr31rv9tsJ8&ab_channel=ArtofVisualization> Youtube - How to create dashboard

<https://www.youtube.com/watch?v=jEgVto5QME8&ab_channel=PenguinAnalytics> Youtube - Tableau in Two Minutes