



Machine Learning for Precision Public Health Workshop – A Hands-on Introduction to Tableau

Summary

19th of March, 2019, 1:20 – 3:30 PM

Hardwick Hall, University of British (UBC) Medical Student & Alumni Centre

Overview of the workshop

This workshop was part of the special seminar series Machine Learning for Precision Public Health, organized by the BC Centre for Disease Control (BCCDC). Following a presentation about data visualization principlesⁱ, this workshop aimed to provide a hands-on introduction to Tableau, a platform for exploring and analyzing data visually to uncover trends, patterns, and anomalies then engage with end user communities to tell a story with the data.

Workshop facilitators Brad Devlin, Tableau Technical Sales Consultant and Maggie Morrison, Strategic Account Manager, along with other Tableau representatives Mya Warren and Sameer Merchant, opened the workshop with demonstrations of data visualizations created with Tableau. Facilitators then invited participants to open up Tableau on their laptop and follow along to build visualizations using Tableau's demo data (a Superstore dataset). The workshop closed with a Q&A session about features specific to visualize health-related data using Tableau.

A total of 28 participants attended the workshop.

Resources to further support learning and orientation to Tableau

1. Tableau for Students
2. Community
3. Tableau Conference and TC18 healthcare presentations
4. Learning (*note: Tuesday, March 26 @ 11am PT is the next Getting Started live 1 hour training*)
5. Extras

TABLEAU FOR STUDENTS

Having its roots in a PhD research initiative, Tableau is passionate about enabling students. So much so that students – *elementary, secondary, post-secondary* – have access to Tableau for free! Please see [Tableau for Students](#) for details.



COMMUNITY

Register for the [Vancouver Tableau User Group](#) to receive meeting notifications and request to join the [LinkedIn VTUG](#). The passionate [Tableau Community](#) including [Forums](#) is another place to ask questions and engage. [Tableau Public](#) is an open environment that allows individuals and organizations to share their visualizations and their insights. The content varies extensively from individual interests to corporate output to public sector engagement of community to causes. Search on any topic or subscribe to the Viz of the Day.

TABLEAU CONFERENCE

Every year, Tableau enthusiasts gather for a few days of intense learning, networking and collaboration at [TC19](#). Here are [TC18 Healthcare](#) related presentations and links to two by AHS in [2017](#) focused on healthcare analytics and [2018](#) focused on the opioid crisis and IT management.

LEARNING

[Live Training](#) – frequently hosted live training sessions on various topics including [Getting Started](#) on [Tuesdays at 11am PT](#) is highly recommended.

Tableau has developed a library of how-to videos to support your Tableau knowledge highlighted below and there are many more hours of [other available content](#).

The Tableau Interface (4 min)

<https://www.tableau.com/learn/tutorials/on-demand/tableau-interface>

Distributing and Publishing (4 min)

<https://www.tableau.com/learn/tutorials/on-demand/distributing-and-publishing>

Publishing to Tableau Online (3 min)

<https://www.tableau.com/learn/tutorials/on-demand/publishing-tableau-online>

Publishing Data sources to Tableau Online (7 min)

<https://www.tableau.com/learn/tutorials/on-demand/saving-and-publishing-data-sources>

Getting Started with Data (6 min)

<https://www.tableau.com/learn/tutorials/on-demand/getting-started-data>

Cross-database Joins (3 min)

<https://www.tableau.com/learn/tutorials/on-demand/cross-database-joins>

Managing Metadata (4 min)

<https://www.tableau.com/learn/tutorials/on-demand/managing-metadata>

Managing Extracts (4 min)

<https://www.tableau.com/learn/tutorials/on-demand/managing-extracts>

Getting Started with Visual Analytics (6 min)

<https://www.tableau.com/learn/tutorials/on-demand/getting-started-visual-analytics>

Drilling Down and Hierarchies (5 min)

<https://www.tableau.com/learn/tutorials/on-demand/drill-down-and-hierarchies>



Ways to Filter (2 min)

<https://www.tableau.com/learn/tutorials/on-demand/ways-filter>

Using the Filter Shelf (7 min)

<https://www.tableau.com/learn/tutorials/on-demand/using-filter-shelf>

Interactive Filters (4 min)

<https://www.tableau.com/learn/tutorials/on-demand/interactive-filters>

Getting Started with Calculations (3 min)

<https://www.tableau.com/learn/tutorials/on-demand/getting-started-calculations>

Intro to Table Calculations (3 min)

<https://www.tableau.com/learn/tutorials/on-demand/intro-table-calculations>

Where Tableau Filters (4 min)

<https://www.tableau.com/learn/tutorials/on-demand/where-tableau-filters>

Additional Filtering Topics (7 min)

<https://www.tableau.com/learn/tutorials/on-demand/additional-filtering-topics>

Intro to LOD expressions (6 min)

<https://www.tableau.com/learn/tutorials/on-demand/introduction-lod-expressions>

Trend Lines (5 min)

<https://www.tableau.com/learn/tutorials/on-demand/trend-lines>

Reference Lines (7 min)

<https://www.tableau.com/learn/tutorials/on-demand/reference-lines>

Forecasting (6 min)

<https://www.tableau.com/learn/tutorials/on-demand/forecasting>

EXTRAS

Webinar April 4 - [Designing Time](#)

Blog Post – [Addressing the Opioid Crisis](#)

Story - [Seattle Cancer Care Alliance](#)

AHS Snapshot – [Healthcare Utilization in Alberta](#)

Tableau Public – [Alberta Health Services](#)

Health Data Management – [Trends in Healthcare Analytics](#)

Books – [Tableau For Healthcare](#) by HealthDataViz, a Tableau partner specializing in analytics in healthcare or [The Big Book of Dashboards](#), a great resource that includes online activity to reinforce the learning

¹In the Mar 19th Grand Rounds presentation of [How to Visualize Your Data for Analysis and Communication](#), Anamaria Crisan discussed the role of data visualization in this era of public health and provided an overview of techniques and tools for creating data visualizations for analysis and communications.