Chris (Tableau) ~2 Minutes

Our Dataset had over 100 images…

So with all this abundance of data that we had, it would be easy for anyone to be quickly overwhelmed. As a result, we wanted to create a way for our users, regardless of prior knowledge, to be able to quickly understand and interpret our data at a mere glance.

And this was the impetus for our Tableau Visualizations. Using Tableau, we were able to create pie charts, bar charts, and stacked bar charts to illustrate the story our data was telling. Its flexible toolset allowed us to highlight the gender and ages of our patients as well as the view position of our chest x-ray to visually display any contribution and/or influence they may have had on a patient’s diagnosis.

For example, if a user wished to know the proportion of patients who were female; they could quickly access our Tableau Story’s gender ratio pie chart to find that almost 44 percent were.

The same could be said for someone looking to know a patient’s most common diagnosis. To find that out, a user would only need to consult our diagnosis bar chart. Using that chart, a user could instantly understand that most patients actually had ‘No Finding’ as their diagnosis.

In addition, the Tableau Stories provided the opportunity to caption descriptions of all our charts, further elaborating and focusing the scope of our data’s most pertinent information.

This is not to say that using Tableau is without difficulties. Indeed, Tableau featured a persistent issue where it would not properly parse its Preferences without changing the file’s extension from tps to tps.bak. A similar problem arose when Tableau’s internal logs would not register unless altered from Log to Log A. However, ultimately these scenarios represented minor issues within a relatively intuitive program.

But for us, Tableau Visualizations were not enough. We had to go further…so for a deeper dive, I will hand it off to William to talk about our Machine Learning Model.