

# Wentworth Institute of Technology

ENGR 5500 – Engineering Senior Design I



Abdullahi Ibrahim, Brianna Chery, Jacob Fahnestock

Electrical and Computer Engineering

May 16, 2023

### **ITS\_LIVE Embed & Other Team: Jacob Fahnestock**

The ITS\_LIVE team has requested an embedded demo for their homepage. I created a prototype to begin discussions on how it could be done which is [available here!](#) In the process of creating this embedded demo I discovered [plotlyjs](#) a more opinionated and concrete plotting package than our current one (victory charts.) Plotly also better replicates the functionality of Matplotlib allowing for the user to draw zoom boxes on the plot instead of scroll zooming. For various reasons this performs better than the other package and is more useable. Next steps are to replace the victory chart with a plotly chart in the main web browse tool. Then demo the prototype to the ITS\_LIVE team.

### **Greenland Glacier Atlas Team: Abdullahi Ibrahim, Brianna Chery**

The Greenland Glacier Atlas Project is an extension of the ITS\_LIVE Project and it will be a tool in which a user can see a map of notable ice flows and learn their flow history. There is a geoJson file available that contains coordinates from every notable glacier in Greenland. There is also an excel file that includes the names of the glaciers and the name associated with the specific coordinates. After doing research and gaining a background knowledge of the coordinates and glaciers, our next steps would be to match up the coordinates from both files with their respective names. The geoJson file from Twila Moon and the excel with the names both coordinates but they do not all match up. Our goal would be to assign the glacier names to Twila's selected coordinate points. From there we can think about the plots for the images of the glaciers.

<https://tc.copernicus.org/articles/9/2215/2015/tc-9-2215-2015.pdf>

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2020JF005585>