

Plotly Dash Needleman/Waterman Web App with Fei Xiang, Nobutaka Kim T00057442

She is writing the engine (Needleman/Waterman) using dynamic programming and I will make a frontend and hopefully interface to interact with NCBI databases using their FTP server to download sequences to be aligned using the engine.

Plotly Dash is in Python and has a Bio module which I want to use as much as possible for graphical representations of results.

With this, I can extend this project after the course ends to include other functionality like Clustal Omega and include my ideas to search for homologs that I mentioned in email.

Thus, this is the first step in making a pipeline for various useful functions that might assist bioinformaticians and biologists.