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Guided Research Grad I
Week 6 Summary Report

As a refresher, my research topic is the application of Large Language Models (LLM) in prediction of maritime vessel trajectories.

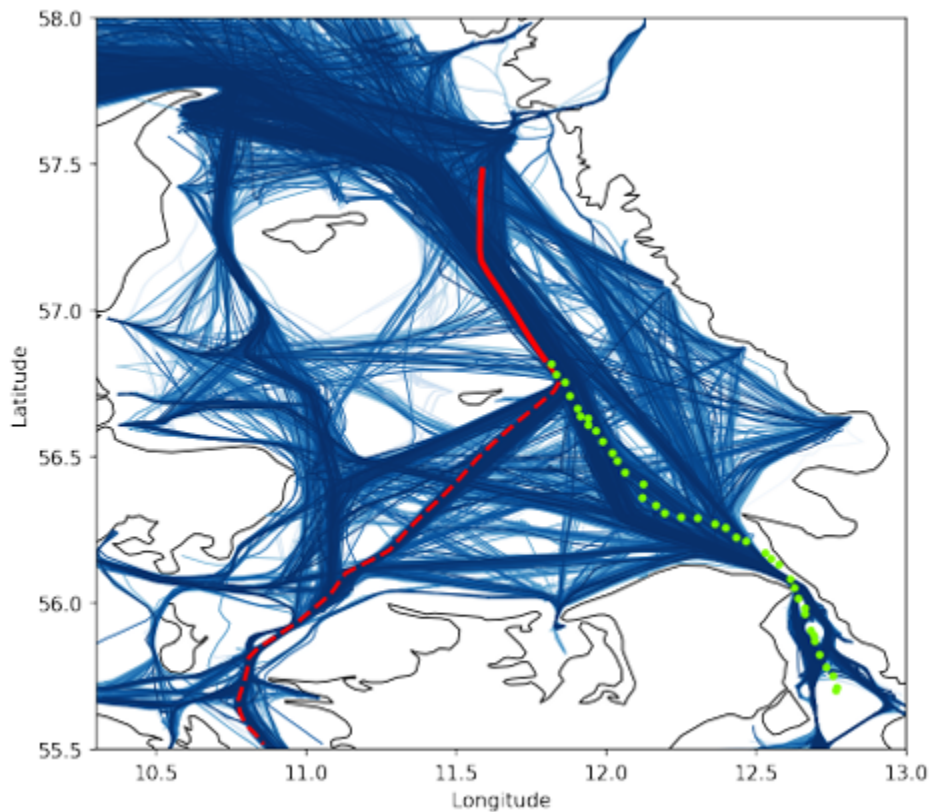


Figure 1. LLM input path in solid red, predicted output path in dotted green, and actual output path in dashed red.

This week is where I started to try fine-tuning. To my dismay I learned from the Open AI docs that GPT 3.5 Turbo, and GPT 4.0 do now allow for fine-tuning. This is especially annoying because I had been using GPT 3.5 Turbo as my benchmark during my few-shot training. Now I needed to benchmark the GPT 3.0 models, so I can tell if fine-tuning is actually improving performance. However the most problematic part is the GPT 3.0 models allow for less than half of the input characters as GPT 3.5, meaning I could only train it to take one hour of input points and predict one hour of output points. GPT 3.5 allowed me to predict 3 hours.