Part A

Xuni Huang

First, I noticed that ASR is very good with common fictional places such as Hogwarts, Narnia, and Wakanda, as well as common fictional people like Saruman and Sauron. However, ASR is not very good for detecting the scientific names of plants. There are three reasons why ASR cannot correctly recognise many scientific names of plants. The first reason is that all the scientific names originate from people's names, such as Latin, Greek, and other languages that are not English. Unlike the fictional names I tried, they don't follow the rules of pronunciation in English, while the ASR I tried has a default setting for language, which is English. The second reason is that many people might not mention all these plants when using this ASR model, and the model doesn't get a chance to be self-tuned. For some words like farfugium, after I tried so many times, ASR actually recognised them correctly, and the confidence score increased. The third reason is my accent. For some more common words used in plant scientific names like japonicum, ASR recognised it without any issues as long as I pronounced it with a more careful accent. Based on my attempts and observations, a customised model based on the detected languages, more training data, and higher tolerance of accents should be helpful to solve the incorrect recognition.