

Daily Log

Monday September 16

Started Using Speech Recognition on the First TED Talk, by Ken Robinson. First Tested with 10 Seconds and Continued to Increment the Duration. Found Out After about 200 Seconds the Script Began to Return an Empty Array or Throw an Error. Started to Listen to TED Talk to See if There was an Issue.

Tuesday September 17

Realized the Issue was Applause and Laughter, Common in TED Talks. Seemed to Mess up the Speech Recognition due to Difficult Translations. Looked up Potential Fixes for This but Could Not Find Anything. Tried to Add more Parameters and Tested on Different TED Talks, but Errors Continued to Pop Up. Had to see if Other Audio to Text APIs Easily Accounted for This Issue. On <https://realpython.com/python-speech-recognition/> it Explicitly Mentioned that Hand Claps and Laughter would Ruin the Whole Translation.

Thursday September 19

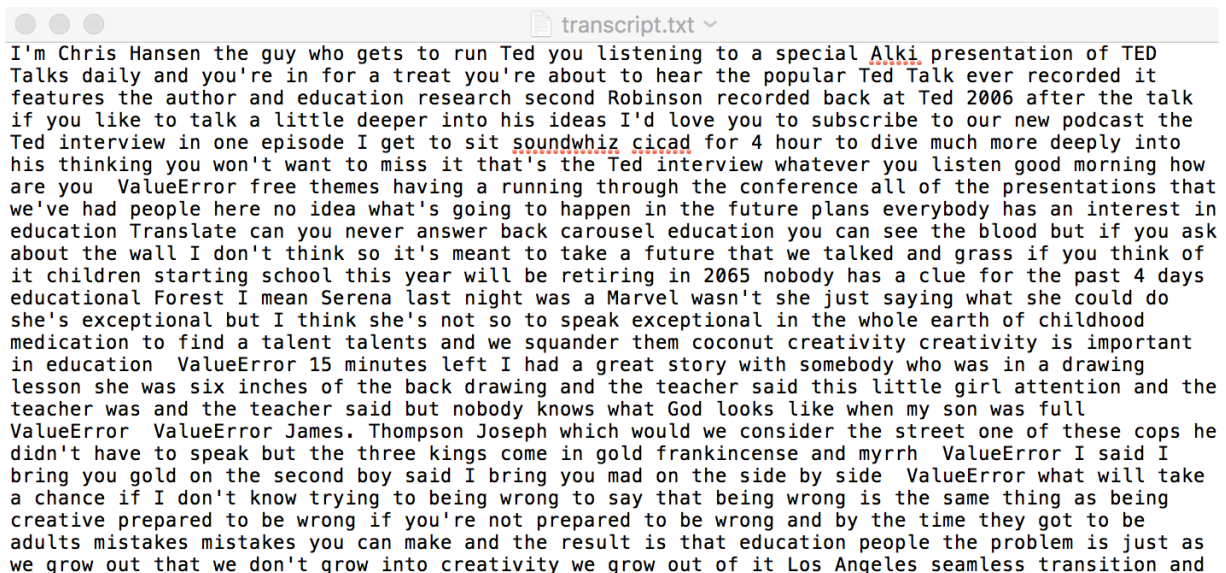
Decided to Stick with Speech Recognition and Tried to Implement my Own Fix to this Issue. Split the Audio File into 10 Second Segments and Individually Translated Them and Concatenated all the Translations at the End. This Seemed to Work Much Better and I could Translate the Whole TED Talk and Print the Transcript into a Text File. If the API Could not Translate the Segment, it would Add "ValueError" in the Transcript.

Timeline

Date	Goal	Met
Sep 6	Finish Formatting Sizeable Dataset	Yes, Dataset has 2461 Entries
Sep 13	Find Good Audio to Text API or Github Repository and Implement	Yes, Found Speech Recognition and Tested with Sample .wav File
Sep 20	Be Able to Input a Whole Ted Talk and List the Most Probable Transcript	Yes, Decent Transcript Returned in about 40 Seconds
Sep 27	Be Able to Better Account for Sounds such as Applause and Laughter	
Oct 4	Find Best Extension of Speech Recognition and Compare Transcripts	

Reflection

It was frustrating that a single instance of applause or laughter would make the whole transcript return an empty array or throw an error. I again had to consider finding different APIs that could adjust for this issue. I was happy to find a relatively easy fix, by splitting the audio files into 10 second segments. Right now, I just add "ValueError" to the transcript if it cannot translate the segment. Next week, I want to see if there is a better fix to this issue, as I suspect some text is lost if it is in the same segment as applause or laughter, as an empty array would be the only thing returned for the segment. In addition, I am curious if "ValueError" is printed for non applause/laughter. Below is the beginning of the transcript for the first TED talk.



I'm Chris Hansen the guy who gets to run Ted you listening to a special Alki presentation of TED Talks daily and you're in for a treat you're about to hear the popular Ted Talk ever recorded it features the author and education research second Robinson recorded back at Ted 2006 after the talk if you like to talk a little deeper into his ideas I'd love you to subscribe to our new podcast the Ted interview in one episode I get to sit soundwhiz cicad for 4 hour to dive much more deeply into his thinking you won't want to miss it that's the Ted interview whatever you listen good morning how are you ValueError free themes having a running through the conference all of the presentations that we've had people here no idea what's going to happen in the future plans everybody has an interest in education Translate can you never answer back carousel education you can see the blood but if you ask about the wall I don't think so it's meant to take a future that we talked and grass if you think of it children starting school this year will be retiring in 2065 nobody has a clue for the past 4 days educational Forest I mean Serena last night was a Marvel wasn't she just saying what she could do she's exceptional but I think she's not so to speak exceptional in the whole earth of childhood medication to find a talent talents and we squander them coconut creativity creativity is important in education ValueError 15 minutes left I had a great story with somebody who was in a drawing lesson she was six inches of the back drawing and the teacher said this little girl attention and the teacher was and the teacher said but nobody knows what God looks like when my son was full ValueError ValueError James. Thompson Joseph which would we consider the street one of these cops he didn't have to speak but the three kings come in gold frankincense and myrrh ValueError I said I bring you gold on the second boy said I bring you mad on the side by side ValueError what will take a chance if I don't know trying to being wrong to say that being wrong is the same thing as being creative prepared to be wrong if you're not prepared to be wrong and by the time they got to be adults mistakes mistakes you can make and the result is that education people the problem is just as we grow out that we don't grow into creativity we grow out of it Los Angeles seamless transition and