Real Time Direct Speech-to-Speech Translation

Sanchit Chaudhari, Aniket Shukla, Tanvi Gaware, Nehali Shinde
Students, Department of Information Technology[1,2,3]
Professor, Department of Information Technology[4]
Dr. D. Y. Patil College of Engineering, Ambi, Pune, Maharashtra, India

Abstract: *Speech-to-Speech translation has been developed to ease and bridge the communication gap between people who speak different languages. Speech-to-Speech technology is effective because it allows speakers of languages from around the world to communicate with each other by minimizing the language. Gap in global commerce and cross-cultural communication. Recent studies have recognized speech-to-speech translation as one of the top technologies that will transform and reform the current language barriers in our world. Using Python and Spyder libraries development of the voice-to -voice translation system is possible. Use of Google's Translate API comes in handy during the whole development process.*

Keywords: Speech-to-Speech, Language Barrier, Translation, Python, Spyder, Voice-to-Voice, API

REFERENCES

[1]. Jan Chorowski, Dzmitry Bahdanau, Dmitriy Serdyuk, Kyunghyun Cho, and Yoshua Bengio, "Attention-based models for speech recognition," in Advances in Neural Information Processing Systems 28: Annual Conference on Neural Information Processing Systems 2015, December 7-12, 2015, Montreal, Quebec, Canada, 2015, pp. 577–585.

[2]. Dzmitry Bahdanau, Kyunghyun Cho, and Yoshua Bengio, "Neural machine translation by jointly learning to align and translate," CoRR, vol. abs/1409.0473, 2014.

[3]. Yuxuan Wang, RJ Skerry-Ryan, Daisy Stanton, Yonghui Wu, Ron J Weiss, Navdeep Jaitly, Zongheng Yang, Ying Xiao, Zhifeng Chen, Samy Bengio, et al., "Tacotron: Towards endto-end speech synthesis," arXiv preprint arXiv:1703.10135, 2017.

[4]. Long Duong, Antonios Anastasopoulos, David Chiang, Steven Bird, and Trevor Cohn, "An attentional model for speech translation without transcription," in NAACL HLT 2016, The 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, San Diego California, USA, June 12-17, 2016, 2016, pp. 949–959.

[5]. Alexandre Berard, Olivier Pietquin, Christophe Servan, and ´ Laurent Besacier, "Listen and translate: A proof of concept for end-to-end speech-to-text translation," CoRR, vol. abs/1612.01744, 2016. .