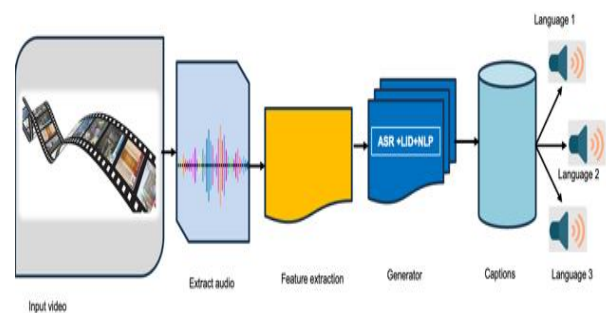# Real-Time Multilingual Captioning Plugin: A Seamless Solution for On-the-Fly Multilingual Subtitles

Nexucon developed a unique real-time multilingual plug-in system to generate subtitles for a video stream. LID (Language Identification), ASR (Automatic Speech Recognition), MT (Machine Translation) and NLP are some of the most important technologies used to build this system. Together, the LID, ASR, MT and NLP components help to generate accurate and most natural subtitles. This plug-in can be used by social media platforms to help its videos (be it in any language) reach a much wider audience across different linguistic groups. This plug-in can also be configured for use in various live events, such as conferences, lectures, and broadcasts, so that it can also reach audience who may not be well-versed in a certain language and even help people with hearing disability to attend live events.

The plug-in works specifically on the audio channel of the video stream. It processes the audio and detects its language automatically using state-of-the art LID models. It uses language-specific ASR systems to obtain the transcription of the system. Our advanced natural language processing unit processes the transcription to produce the most relevant subtitle in the most natural form. AI-based Machine

Translation models are used for translation pupose to be able to produce subtiltles in the language of users' choice. Nexucon's plugin software can also be configured to record transcriptions of meetings, interviews, and other business communications.

Overview:

Client: IT & ITeS Companies, Academic Organisations, Social media platforms & Broadcasting platforms

Region: India, UAE

Industry: Utility and customer supports, Education, Social media platform, IT & ITeS

Client challenge: Clients were searching for a real-time, cost-effective and accurate subtitle generation for video streams with a support for multiple languages, accents, and dialects. The growing cosmopolitan nature of corporate business setup demands effective real-time communication among different linguistic groups. Also, social media platforms has its presence among a wide and linguistically diversed audience. There is a need for a solution to facilitate effective real time sharing and communication in such cases.

Solution: A unique multilingual on-the-fly captioning plugin has been developed to create subtitles for video streams in the language configured by the users. It offers numerous advantages, like, multi-linguality , cost-effectiveness, enhanced user experience and a global reach. State-of-the-art AI technologies are used to create the subtitles in the most accurate and natural form.

Benefits:

- It allows for real-time captioning, which is more effective than traditional methods.
- Our system enables content creators to reach a global linguistically-diversed audience by providing real-time captioning for their video content.
- Nexucon's system is configurable to cater to meetings, interviews and other live or recorded events.

Building a customized solution:

Nexucon's team work with the clients to understand their specific needs so that the product can be customized to be cost-effective and at the same time to ensure

that it meets the requirements most effectively. Depending on use cases, the advanced NLP module can augment the subtitles for better experience while staying true to the content.