# Language Intelligence - Session 4

#### **Time:** 22 September 2023 - 10:15 to 13:00

#### **Chair:** Arthur Wetzel, Member of the Board of Advisors, LT-Innovate

## **Talks**

### From Homegrown to Prefabricated: Automatic Speech Recognition over the Last Decade

The last few years have seen a dramatic paradigm change in the world of automatic speech recognition. Whereas previously technology and models were typically created and trained from the ground up, today’s settings often entail large pre-trained models which are produced by a few select players and fine-tuning by speech recognition experts. The trend to build upon and refine others’ products is likely to continue and will allow non-experts to create models in a “no-code” manner in the near future. In this talk we give a brief overview of the development of speech recognition technology in the last years, present the current trends and try to provide an outlook for the near future.

| Erinç DikiciSenior Research Engineer, HENSOLDT Analytics[LinkedIn profile](https://www.linkedin.com/in/erincdikici/) |
| --- |

### AI-enabled Speech Dataset Creation

As the accuracy of ASR and NLP engines has made huge leaps in the past few years, so have the requirements for fine-tuning and training with golden speech datasets, both in terms of quality and precision. We present here the workflow of our dataset creation solution, which combines proprietary platforms, specialized AI engines and humans in the loop (language experts working at each appropriate stage), from utterance, profile or scenario creation to content validation, audio segmentation, and transcription - key components to building linguistic intelligence.

| Michel LopezCEO, E2F[LinkedIn profile](https://www.linkedin.com/in/michellopez/) | Jean-Charles RischHead of Technology, E2F[LinkedIn profile](https://www.linkedin.com/in/jean-charles-risch/) |
| --- | --- |

### Media Content in Language Analytics

Language technology tools are more often than not applied to client's proprietary contents. Of course there is so much other stuff out there, including everything that comes from the ever growing and constantly more diversified and complex media environment. Social networks, blogs, news sites, radios, videos, televisions, podcasts, newsletters, the deep web and the dark web ...

Although the basics may be the same, there are other challenges here, like securing access to sources, data cleaning processes that can be seamlessly applied to constantly changing frameworks, handling very large volumes of data, selecting meaningful from non-meaningful content, etc.

The presentation will explore the issues and the rules of engagement connected with giving value to media content through language analysis, and will present a few use cases.

| Alessandro CederleBusiness Development Europe, TVEyes[LinkedIn profile](https://www.linkedin.com/in/alessandrocederle/) |
| --- |

### The Democratization of AI with No-code Machine Learning

One of the issues of wide AI adoption relates to the lack of capability specialization and lack of customization by non-technical end-users. Artificial Intelligence, even with the immense traction of the potential of Large Language Models (LLMs) such as ChatGPT and Bard, still has to cater to specific business needs, secure deployments, and become seamless in its adoption.

The AI Factory developed by Zetta Clouds aims to "democratize" AI and make it available to business users through a no-code AI approach. The platform allows any user with a specific requirement to build or adapt an AI model with no data science or machine learning skills, and rapidly deploy an AI engine in production. Currently focuses on Text Analytics AI tasks, Factory can be used to build classifiers or named entity recognizers for tasks such as email filtering, document triage, PII recognition, automated labelling, opinion mining, or online disinformation detection.

| George BaraFounder & Chief Strategist, Zetta Cloud[LinkedIn profile](https://www.linkedin.com/in/georgebara/) |
| --- |

### Don’t Look Up: Multilingual Content Creation with GenAI

In this spotlight session we will explore the way that Generative AI and Large Language Models are changing the content creation process and understand the value and the challenges that this new AI brings to the content creation and localisation functions at an enterprise level. We will discuss the capabilities and limitations of using AI for these tasks and look at the role that human experts will play in the wider workflow. We will show how GenAI enables native content creation in multiple languages from a single brief, offering more control than Custom NMT and even surpassing the control provided by human copywriters. Anyone looking to harness the use of GenAI in their company should attend to learn how the merging of localisation and content creation can create significant shifts and can present challenges and opportunities.

| Konstantin SavenkovCEO, Intento[LinkedIn profile](https://www.linkedin.com/in/savenkov/) |
| --- |

### Dealing with the Complexity of Enterprise Content Operation- Architecting Effective Content Operations – a Technology-focused View

The complexity of Enterprise content flows has increased dramatically over the past years from what used to be authoring and translation to now including web content, SEO, graphical design, audio-visual content and relates tasks such as subtitling, dubbing, transcription and more. Having 10’s of CMS systems, multiple systems for specific content tasks such as for example Translation Management Systems (TMS) for translation or Authoring tooling, etc. is no exception in a typical enterprise environment. Combine that with 100’s of different business processes, a globally distributed operation, the need for agility and cost effectiveness as well as increasingly shorter time to market needs and it becomes clear why content teams are increasingly challenged. In this talk we review the current situation and challenges and discuss solutions and best practices..

| Yvan HennecartCRO, Loquell[LinkedIn profile](https://www.linkedin.com/in/yvan-hennecart-911540/) |
| --- |

### MT Customization Without Pivoting: Advantages from a Linguistic and Business Point of View

The best way to get good results with MT is customization. However, most providers don't offer direct customization for non-English language pairs and pivot through English. The result is a lack of quality, because adding an intermediate step is like multiplying fractions (as already shown in this joint article from Kirti Vashee and myself: https://blog.modernmt.com/the-challenge-of-mt-with-non-english-language-pairs/).

In this presentation, I'd like to underline the potential advantages of using an engine that offers direct customization for non-English language pairs. This is a key topic in an always less Anglocentric world. What if, for instance, a German company tried to customize its MT system for its Chinese translations by leveraging only DE-ZH data?

The advantages of this approach will be presented starting from the use case of Comparis, a Swiss consumer empowerment platform that has a customized MT program without pivoting through English: the results are a huge efficiency gain for the Localization team as well as an increase in SEO traffic.

| Daniele GiulianelliLeader Translation / PO Newsroom / Content Innovation Manager, Comparis[LinkedIn profile](https://www.linkedin.com/in/daniele-giulianelli/) |
| --- |

### Practical Uses of Large Language Models in Localization

The presentation will cover the topic of recent advances in the world of AI and latest achievements of the XTM AI NLP Team. Are the astonishing human-like AI bots ready to become professional employees in business scenarios? How to make them useful? Will they take our jobs or create more occupations? These topics are not futuristic fantasies - they are becoming our reality.

| Rafał JaworskiLinguistic AI Expert, XTM International[LinkedIn profile](https://www.linkedin.com/in/rafal-jaworski-poznan/) |
| --- |