



# Advanced Human Language Technologies

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# Presentation



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そして日本語が話せません、何となく



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# Research Timeline



<b>Word2Vec</b> Mikolov et al.	<b>Seq2Seq</b> Sutskever et al.	<b>Attention</b> Bahdanau et al.	<b>Transformer</b> Vaswani et al.	<b>Bert</b> Devlin et al.	<b>GPT-3</b> Brown et al.	<b>ChatGPT</b> OpenAI	
2013	2014	2015	2017	2018	2020	2022	2023?

# Challenges



"One of the challenges of AI now is how to amplify human intelligence, and, **using language technology** [Ed.: such as semantic search and natural language processing (NLP)] and visualization to bridge the [gap] between machines and decision makers"

H. Uszkoreit, Global AI Landscape 2020

# 2023?



- Large Language Models
- Problem-solving as a service
- LLM Integrations:
  - Microsoft's ChatGPT in Bing
  - Google's Bard
  - Salesforce's EinsteinGPT
  - More to come...

# Classes



- Words Embeddings – 13th April
- Word Classification – 27th April
- RNN - Sequence models – 4th May
- Transformers – 11th May
- LLM + Ethics – 18th May
- Discussion/Review – 25th May