Multilingual Communication App:

AI Translation and Voice Integration

"Attention Is All You Need" by Ashish Vaswani et al.

This paper introduced the Transformer model, which has been foundational in many NLP tasks including machine translation.

Link: https://arxiv.org/abs/1706.03762

"Neural Machine Translation by Jointly Learning to Align and Translate" by Dzmitry Bahdanau et al.

Its attention mechanism, which has been a fundamental component in various NLP tasks, including machine translation. This mechanism connects it to many subsequent papers that build upon or improve attention models.

Link: https://arxiv.org/abs/1409.0473

"BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding" by Jacob Devlin et al.

It transformed contextualized word embeddings and impacted various NLP tasks, including translation. Its ideas have influenced subsequent papers on pre-training models for NLP.

Link: https://arxiv.org/abs/1810.04805

"WaveNet: A Generative Model for Raw Audio" by Aaron van den Oord et al.

WaveNet introduced a generative model for audio, paving the way for more natural-sounding text-to-speech systems.

Link: https://arxiv.org/abs/1609.03499

"Tacotron: Towards End-to-End Speech Synthesis" by Yuxuan Wang et al.

This paper introduced Tacotron, an end-to-end neural network model for text-to-speech synthesis.

Link: https://arxiv.org/abs/1703.10135

"**Unsupervised Machine Translation Using Monolingual Corpora Only" by Artetxe et al.**

It explores unsupervised machine translation, which connects it to other papers discussing innovative translation methods.

Link: https://arxiv.org/abs/1711.00043

"Massively Multilingual Neural Machine Translation in the Wild: Findings and Challenges" by Arivazhagan et al.

This paper discusses challenges and insights from training multilingual translation models with a large number of languages.

Link: https://arxiv.org/abs/2007.10357

"SpecAugment: A Simple Data Augmentation Method for Automatic Speech Recognition" by Park et al.

This paper introduces SpecAugment, a technique for improving speech recognition by augmenting spectrogram data.

Link: https://arxiv.org/abs/1904.08779

"Exploring the Limits of Transfer Learning with a Unified Text-to-Text Transformer" by Raffel et al.

This paper presents T5, a text-to-text model that frames all NLP tasks as a text-to-text problem, achieving state-of-the-art results.

Link: https://arxiv.org/abs/1910.10683

"End-to-End ASR: From Supervised to Semi-Supervised Learning with Modern Architectures" by Chan et al.

This paper discusses various end-to-end approaches for automatic speech recognition and their performance improvements.

Link: https://arxiv.org/abs/2006.02578