

# **Mimic Mania – AI Text-to-Speech (TTS) Generator**

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**Abstract:** *Artificial voice cloning replicates human speech characteristics using deep learning. This study explores neural architectures that synthesize lifelike audio with limited voice samples. A zero-shot approach is employed, leveraging a speaker recognition model transferred to a TTS setting. Our system effectively clones voices, even those it hasn't been trained on, by generating natural-sounding speech with minimal input.*

**Keywords:** Synthetic Speech, Voice Cloning, Deep Learning, Zero-Shot Learning, Tacotron, Neural TTS, Speaker Embedding

