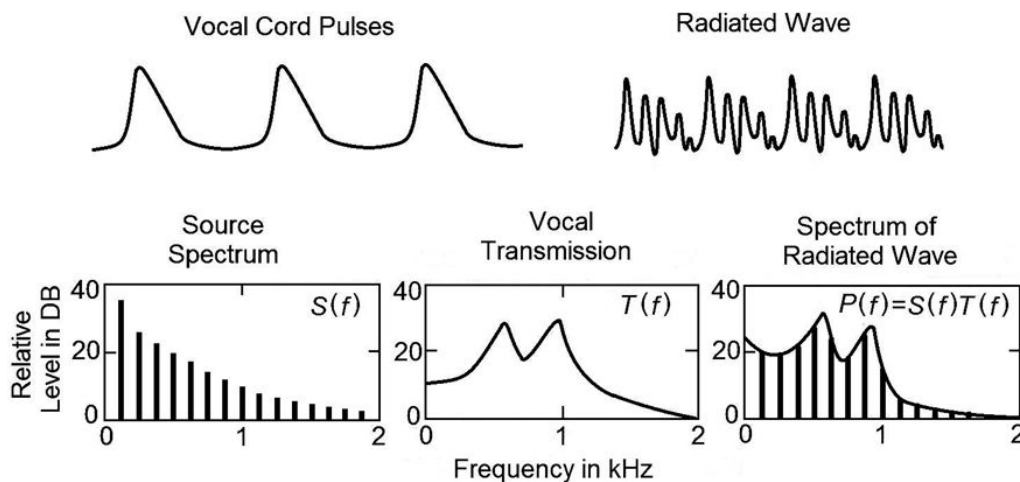**AI INVENTION FEATURE**

The Invention of Apple?s Siri and Other Virtual Assistants

Research and development around computer systems that can understand phonics has been underway since 1952. Originally focused on numbers instead of words, Bell Labs created the Automatic Digit Recognition machine called ?Audrey? that was able to understand basic speech sounds known as phonemes, as well as single digits (0 to 9), spoken aloud by one voice.

Almost 70 years ago, Audrey was able to detect basic phonemes and numbers with up to 90% accuracy, but because the system was only able to understand numbers its application was limited to voice dialing for collectors and toll operators.

Read more

Source-Filter Theory of Voice Production (1)

Vocal Cord Pulses   Radiated Wave

Source Spectrum   Vocal Transmission   Spectrum of Radiated Wave

Frequency in kHz

A quasi-periodic pulsating airflow generated by the opening-closing of the glottis creates a buzzing source, then filtered by the spectrum of upper vocal track to form the voice (Fant 1960).

AI DEVELOPMENT TOOLS NEWS

Numenta Demonstrates 50x Speed Improvements on Deep Learning Networks Using Brain-Derived Algorithms

Using algorithms derived from its neuroscience research, Numenta announced it has achieved ideal performance improvements on inference tasks in deep

learning networks, per the company, without any loss in accuracy.

[Read more](#)

AI EDGE PROCESSING NEWS

Mipsology Zebra on Xilinx FPGA Beats GPUs, ASICs for ML Inference Efficiency

With a peak TOPS of 38.3 announced by Xilinx, the Zebra-powered Alveo U250 accelerator card outperformed competitors in terms of throughput per TOPS and ranks among the best accelerators available today.

[Read more](#)

AI EDGE PROCESSING NEWS

EdgeQ Announces Launch from Stealth, $51 Million in Funding

With the launch and the funding, EdgeQ plans to address the 5G infrastructure market as the first company to couple 5G connectivity with AI compute onto a SoC.

[Read more](#)

EMBEDDED INSIDERS PODCAST

More Free Money & What NVIDIA Didn't Buy

Stacey Higginbotham, a tech industry expert and editor of the eponymous Stacey on IoT blog, joins Brandon and Rich to further the discussion about the ARM/NVIDIA deal. Wait. What did NVIDIA buy? Or better yet, what didn?t they buy? Why didn?t they acquire the entire Arm portfolio? And where is the rest of it now?

Jim McGregor of Tirias Research returns to analyze AMD?s acquisition of programmable logic supplier Xilinx. He provides some analogs to Intel?s purchase of Altera. Later, Rich puts him on the spot: In two years, will the Xilinx/AMD deal be a good one?

[Tune In](#)

Share