



Kazooformation

ka·zoo·for·ma·tion / kazoo information

The Problem

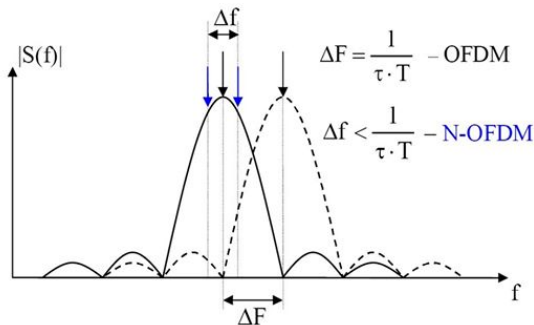


Figure: Subcarriers system of OFDM signals after FFT (Wikipedia)

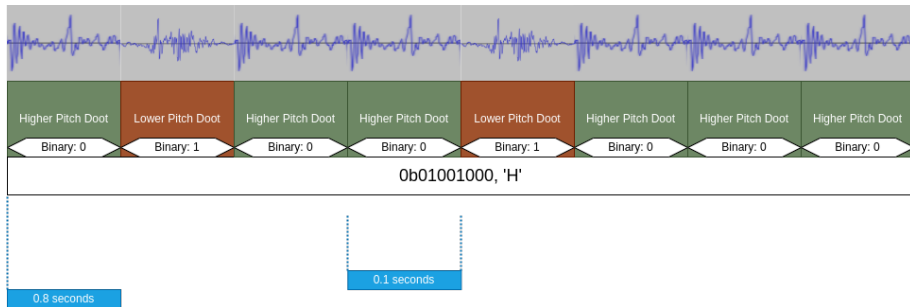
- Wi-Fi: Quadrature Amplitude Modulation
- Bluetooth: Gaussian Frequency Shift Keying
- 5G: Orthogonal Frequency Division Multiplexing
- Broadcast TV: 8-level Vestigial Sideband Modulation

The Solution

A new physical layer that
you can resonate with.



The Solution



Library Application Example: Kazoo Connect

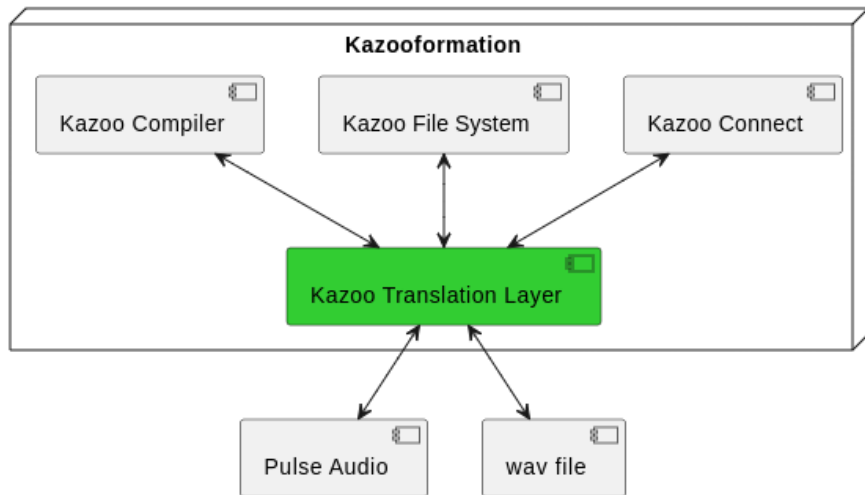
> This was received using kazoo sounds!

> Hello, World!

Type your message here...



Future Plans



Technical Architecture

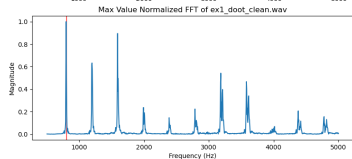
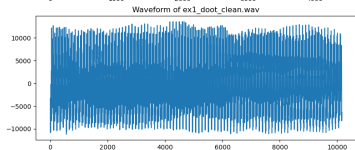
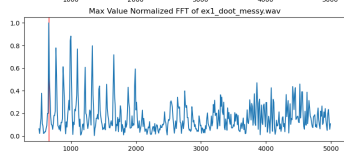
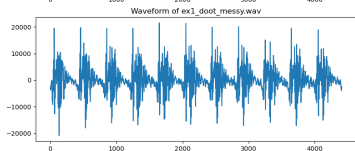
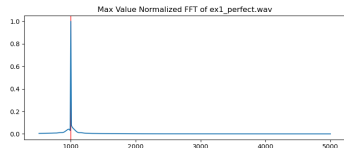
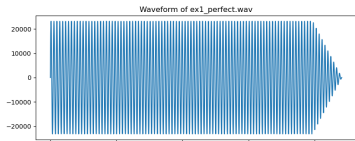
KTL C++ Library

- Stack: C++20, CMake, GTest, FFTW3, Pulse Audio
- Other Tools: Numpy, Pandas, Matplotlib
- Generic Model Structure

Kazoo Connect

- Backend: C++ w/HTTP server using unix TCP socket headers
- Frontend: JS React App

Lessons Learned & Future Plans





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Questions?