

CELLULAR VOICE-CALLS EQUALIZATION USING DISCRETE NORMALIZATION TECHNIQUE

Renjitha R¹ | R Sarathkumar²

¹(Dept of ECE, PG student, Sri Krishna College of Engineering and Technology, Coimbatore, renjithar055@gmail.com)

²(Dept of ECE, Assistant professor, Sri Krishna College of Engg and Technology, Coimbatore, sarathkumar@skcet.ac.in)

Abstract— The phone conferencing method is implemented on the audio technology to the web conferences. The conference call is troubleshooting by the process of infatuated noise, dropped calls and complaints. Before a mobile telephone subscriber can place a call, certain information such as the subscriber's identity and the telephone number of the called party must be supplied. Typically, this information is transmitted to a nearby base station over an access channel which forms one-half of a duplex signaling channel. The half is used for alerting the mobile unit to any calls directed toward it and for keeping the mobile unit to the system status. The mobile channel is desired on the garbled service collisions. The simultaneous access is conferred on the cellular quality to resolve in the various methods to gain voice quality to the conference to gain voice quality in the cellular network. The data quality is amplified on the different technique.

Keywords— Cellular Network; Call Truncated; Error Detection; Spectrum Analyzer; Amplified Pulse

1. INTRODUCTION

Cellular Amplification technique is assembled by content mining process. The content is gathered and cleaned for mining. Preprocess in content information include the stop word evaluation, stemming, converting upper cases to lower and at the same time, to, for, of, as and so on. 425 stop words are available in English dialect. Stemming is the process to join a word. The postfix and prefix words give on the past, present and future tense to a word. Preprocess is to change over the capitalized letters to lower case. In the data the cellular text is searched and embraces rapid and effective access.

2. LITERATURE REVIEW

The base station ordering is localized on the different emerging calls to the cellular method. [1] The next generation to the cellular networks are exploited on the higher order to the public safety standards in tower ubiquitous localization. [2] The mathematical model to assess to the performance to the general network setting. [3] The tradeoff between the areas of localized error probability to the BSs ordered to the agent. The translate to the few meters of decimeters to the ultra-dense method. [4] Forum data collecting process are responsible for collecting Cellular Network and Broadcasting data. The forum evaluation materials are individuals to be participate in the forum. Forum data collection is used to collect the report quality, administrative data. [5] PoC group of communication services in 3G network tried to resolve the common error occurred in the Volte Technology calls, by the working principle and the operation modes of ROHC, designs the processing of the compressor and decompressor. Simultaneity an improved algorithm applied to the U mode is presented against PoC service features, with great benefits on cost and quality of service (QoS). Though it was resolved in Volte calls. [6] In hybrid vehicular ad hoc networks (VANETs), content data can be

downloaded either from 3G/4G cellular networks or from roadside units (RSUs) of VANETs. When downloading via cellular networks, the delay is low but the cost is expensive. While, downloading via VANETs, the cost is nearly free. However, due to the unique characteristics of VANETs, such as frequent disruptions, high speed mobility and low contact rate, which result in huge download delay. In this paper, we study how to minimize the cost of downloading under the hybrid vehicular ad hoc networks and meet the requirement of the vehicular users. We proposed a basic meet algorithm (BMA) and a heuristic algorithm-time slot algorithm (TSA). So for channelization it was done some implementation in the Vehicular Adhoc network to find the efficient channel tracking. [7] Operating frequency bands of the third generation (3G) cellular system and the long-term evolution (LTE) are usually below 3GHz. However, due to the limitation on bandwidth available below 3GHz, the throughput or capacity of 3G and LTE systems cannot be increased easily. This research investigated the feasibility of the application of a wider spectrum in the higher frequency band, such as 6-15GHz band to provide higher capacity for future mobile access. We studied the cumulative distribution of user throughput in cellular communication systems over different frequency bands. In order to evaluate the cellular capacity over different frequency bands, we set up a general cellular simulation model with configurable parameters such as cellular size, user density and frequency reuse factor. In captive cellular network it was implemented in the 3G design. [8] In analog baseband for single-chip 2G/3G/4G MIMO transceivers. By capacitor sharing technique and log tuning, the RX filter is programmable to set f_c from 0.1 to 14MHz with 2% accuracy with 93dB gain range which is linear-in-dB. The TX filter suppresses DAC images and noise for Saw- less with constant or ramping envelope. A digital calibration adjusts f_c , Q, and DC offset. The filter implemented in 65nm CMOS, occupies 2.79mm², and consumes

7.3/8.4/10.2mW with 1.2V supply for 2G/3G/4G, respectively.

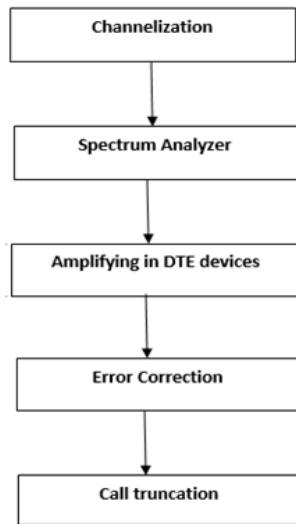


Fig a). Existing technique

[9] The power-mixer bias current is dynamically adjusted based on the instantaneous baseband signal swing using a fully-differential hybrid full-wave rectifier/envelope-detector circuit. Dynamic biasing leads to greater than 50% current savings when compared to fixed-biasing while providing a higher output power with better linearity. Implemented in 28 nm CMOS technology, the TX shows better than -157 dBc/Hz RX-band noise emission and -41 dBc ACLR for output powers up-to +4 dBm across all 3G/4G bands, while demonstrating above 80 dB of gain control range. In addition, the TX can be configured to provide better than -65 dBc CIM3, allowing it to meet stringent spurious emission specifications when transmitting 1 RB 4G LTE signals. In the 4G network it was resolved around 65% gaining the voice. [10] compact multiband antenna system for mobile handsets capable of covering 2G, 3G and 4G cellular frequency bands. The antenna system is composed of two antennas that are etched diagonally on the non-grounded portion of the substrate board. The substrate board used is FR- 4, of relative permittivity 4.35 and loss tangent of 0.02, with overall dimensions of 136 × 70 × 0.8 mm 3. The antenna for covering 4G and WLAN frequency bands is a direct fed printed monopole antenna whereas, the antenna for covering the 2G and 3G cellular services is a coupled fed monopole antenna. Two inverted-L shaped metallic extensions, etched on the bottom layer of the substrate, were introduced to improve the isolation between antennas. The isolation achieved is better than 16 dB in the lower band and 22 dB in the upper bands, leading to an envelope correlation coefficient of less than 0.251.

3. PROPOSED METHODOLOGY

This paper studies cellular network performance using a frequency analyzation and amplification of network behavior impacting user-perceived conference call with more than 2 users. To this end, we consider carrier signal, round trip time latency from ping, and DNS lookup signal strength from end-to-end performance metrics. In addition to gathering raw performance data, we

annotate our measurements with path information gathered from traceroute, the identity of the device's carrier, its cellular network technology, signal strength, location and timestamp. To reason about the root cause behind performance changes, we use path information, carrier signal, call connectivity and signal strength readings.

A. channelization

We are now going to show to channelized and sub band decomposition have a strong relationship and that it is possible to compute channelized through sub band decomposition. To show this relationship, we first substitute the definition of wavelet functions $\psi_{j,k}(n)$,

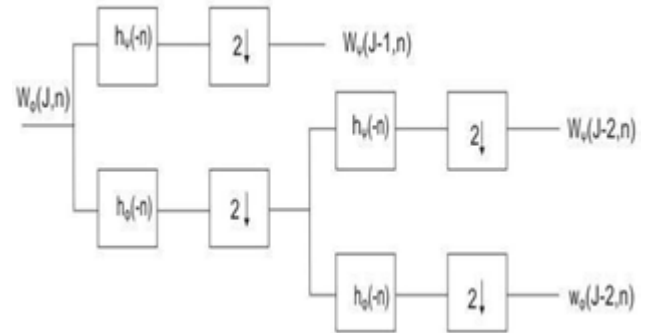


Fig b) Wavelet functions

Steps:

Spectrum Analyzer

We rewrite the expression to the wavelet function in terms of weighted sum of shifted, double-resolution scaling function.

Amplifying in DTE devices

We rewrite the expression for wavelet function in terms of weighted sum of shifted, double-resolution scaling function.

Error Correction

The error correction is string, number and Boolean values. The string containing characters "s" "t" "r" "i" "n" and correction are used to split the data. They are supported the Unicode character code. They are hexadecimal data. error correction objects are end with curly brackets. The key value pairs are separated by commas. The data for the transform.

$$H_1(z) = \frac{[1 - z^{-m}]^p}{[1 - 2\cos(\theta)z^{-1} + z^{-2}]^t}$$

$$H_2(z) = \frac{[1 + z^{-m}]^p}{[1 - 2\cos(\theta)z^{-1} + z^{-2}]^t}$$

Call truncation

These transfer function comes from the call truncation to be truncated on the complex- conjugate poles that always lie exactly on the unit circle. Thus, we can derive the denominator as follows

$$\text{Denominator} = (z - e^{j\theta})(z - e^{-j\theta})$$

Multiplying the two factors, we get

$$\text{Denominator} = z^2 - (e^{j\theta} + e^{-j\theta})z + (e^{j\theta}e^{-j\theta})$$

Using the identity,

$$\cos(\theta) = \frac{e^{j\theta} + e^{-j\theta}}{2}$$

We arrive at

$$\text{Denominator} = 1 - 2\cos(\theta)z^{-1} + z^{-2}$$

Multiplying the two factors, we get

$$\text{Denominator} = z^2 - (e^{j\theta} + e^{-j\theta})z + (e^{j\theta}e^{-j\theta})$$

Equation (7.3b) also places m evenly spaced zeros around the unit circle every $(360/m)^\circ$. Set $z^{-m} = -1$ or equivalently,

$$z^m = -1$$

We can solve for z in the same manner as described above. On the unit circle, $z = -1$ every $(2n + 1)\pi$ radians. The solution is

$$z = e^{j[(2n + 1)/m]\pi}$$

where n and m again are integers.

Comparing the equations, $(1 - z^{-m})$ and

$(1 + z^{-m})$, the difference in the placement of the zeros is a rotation of $1/2 \cdot (360/m)^\circ$. Figure 7.2 shows a comparison of the results from each equation. When m is an odd number, $(1 + z^{-m})$ always places a zero at 180° and appears “flipped over” from the results of $(1 - z^{-m})$.

4. RESULT

Signal segmentation modulation is analyzed through the analog signal of carrier is converted by a digital data bit stream. Logic 0 (low) Logic 1 (High). Here the analog signal bearing information is transmitted by the digital method. The pulse wave modulation is processed by the continuous sampling period using PDM, PPM, PCM method by the call truncated transmitting intervals. radio frequency is sampled.

5. CONCLUSION

The cellular network is amplified by the pulse modulation to be transmitted on the amplified signal. The intervals and transmitting a very short pulse of radio frequency carrier for each sample, with the pulse characteristics being varied in some manner proportional to the signal amplitude at the sampling instant. Pulse modulation technique is modified by the continuous wave at periodic.

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