



Technical Meeting 9 April 2014

The Greek Club, South Brisbane

Investigation of Digital Audio Manipulation Methods

Brendan Trevorrow

University of Southern Queensland

Audio recordings are often archived in digital format. It is therefore desirable to be able to manipulate these recordings in their digital form, via digital signal processing techniques. This presentation investigates the application of such techniques in three situations: 1) the extraction and suppression of a melody in a digital audio recording, 2) change of tempo (time stretching) of a polyphonic musical recording without change of pitch and 3) the reconstruction of audio waveforms which have been truncated (clipped) due to sample values exceeding full scale deflection.

Brendan is a Bachelor of Electrical and Electronic Engineering student at USQ. Based in Mackay, his experience includes nine years as a design draftsman. He is the recipient of the 2013 AAS Queensland, Acoustic Bursary.

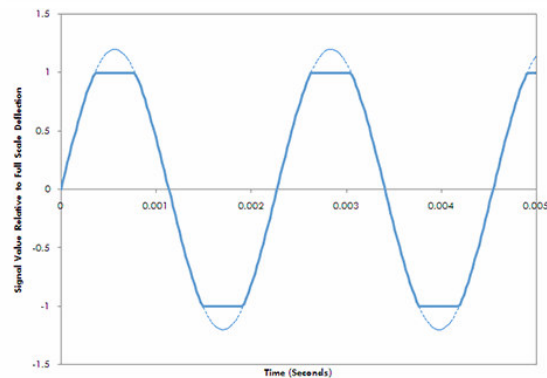
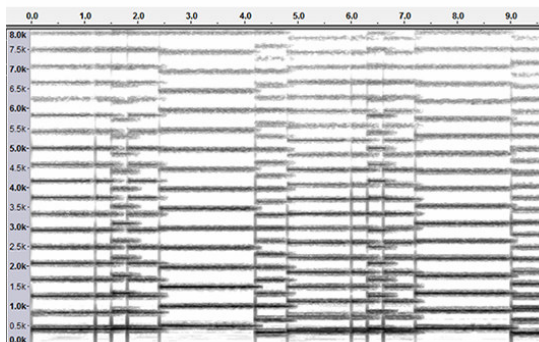
Detailed Analysis of Acoustical Performance of Smart Phone Devices

Samuel Denman

University of Queensland

Smart phone devices are becoming ever more prevalent in everyday life. The range of available applications for use with these devices is expanding at an even faster rate. Niche applications include sound level measurement apps. The project aims to determine the accuracy of such devices and applications and asks: have they any place in the professional or educational acoustics environment? This talk will describe some of the results obtained and the limitations of these devices when used by the unwary.

Sam is a 6th year Mechanical Engineering and Finance student at UQ. He is the recipient of the 2013 AAS Queensland, RJ Hooker Bursary.



DATE & TIME: 6:30pm, Wednesday, 9 April 2014

VENUE: The Greek Club
29 Edmondstone Street
South Brisbane QLD 4101
<http://www.thegreekclub.com.au>

Refreshments will be provided

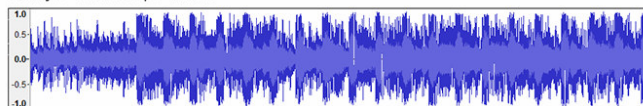
COST: Free to AAS members and guests.

Non-members: \$20. (Payable in cash on the night. A Tax Invoice will be provided).

RSVP: 5.00 pm Tuesday 8th April 2014

Richard Devereux,
Secretary, Queensland Division
rdevereux@acran.com.au

C# Major - 140 beats per minute



C# Major - 132 beats per minute

