

Proposal

Philip Hannant

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1 Introduction & Background

Beat detection and tempo analysis is a fundamental skill honed by musicians and in particular drummers, their ability to perform at a consistent tempo determines a piece of music's rhythm.

There has been a lot of work carried out in the field of tempo detection, Hugh Christopher Longuet-Higgins' work probably represented the first attempt to follow beat performance in relation to tempo [1].

2 Aims and Objectives

As part of my project I propose to build a real time drumbeat tempo analyser which implements both sound energy analysis and discrete wavelet transform technologies. I will provide more details regarding the system architecture in the following sections.

2.1 Proposed Architecture

In order to function sufficiently the system will need to encompass the following features:

- Sufficient signal processing, the solution will need to process the audio in appropriate durations in or hell

3 Development Plan for the Solution

4 Project Schedule