

# Welcome to MeloMusic

By: Ronnie Rahenkamp and Nat Nguyen

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# Problem Statement

- Our project MeloMusic hopes to solve the issue of music transcription for music that has yet to have a public score available to listeners.

# Technical Challenges

- Frequency to Note Conversion
- Compilation and dependencies
- Variability in tempo
- Vectorization of .wav files

# Related Work

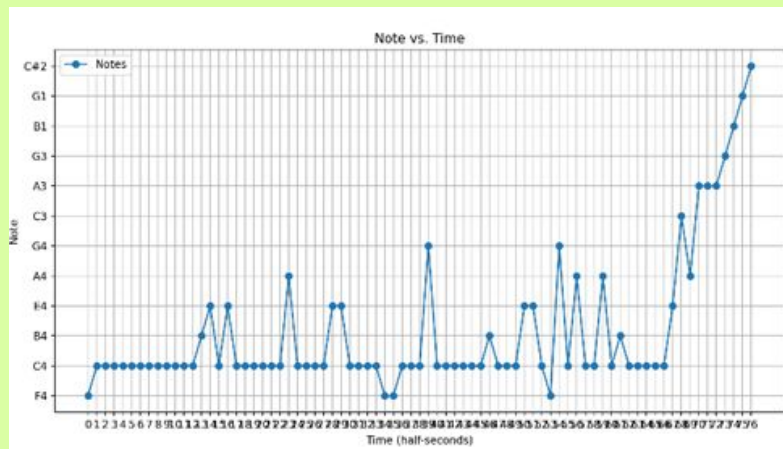
Klang.io - AI Paid Music Transcription

Sebastian Murgul and Michael Heizman - Work on Transcribing Guitar Strumming

Ian VonSeggern - Music identification with pydub

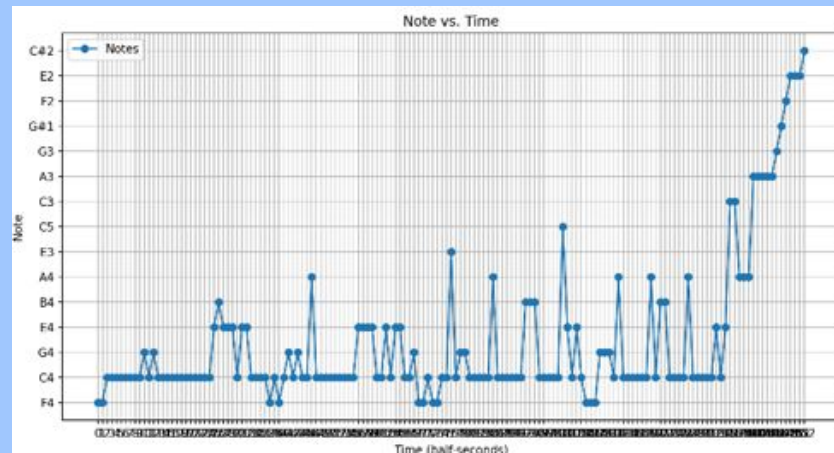
# Results

In the trail with segmentation by seconds, there are some notes that were not caught by the system.



## Seconds

The trail with half seconds catches some of the points at which averages were muddled and corrects them.



## Half-Seconds

# Broader Impact

- **USES:**
- Useful for improving listener QoL within music streaming services
- Useful for independent listeners who wish to avoid large fees for similar applications
- **LIMITATIONS:**
- Identification upon rapidly changing music tempos
- **FUTURE:**
- Adjustable slider for frequency of split so listeners can fine tune the transcription to their chosen tempo.



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