

## Project Abstract

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Project: "The Music Box"

We aim to build a system that listens to music and then analyzes it for its basic components, much like someone would do in a music theory class. It will, ideally, be able to pick out the key, the basic melodic line (which will probably be someone singing), figure out the tempo, and analyze the chords present.

The analysis will happen after recording, but we're also aiming to have real-time analysis for tempo and chord, in addition to some sort of visualizer. We'll use the VGA connection to show our analysis on the monitor.