

FPGA Auto-Tune

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We plan to make a system that does real-time pitch correction. The FPGA will take audio input from a microphone. Then, the FPGA will identify the individual pitches and tune them by shifting their frequencies to the nearest correct pitch in equal temperament. The FPGA will playback the corrected audio through some speakers in real time. We also plan on adding a recording feature, so people can playback their performances. If we have the time, we will make this part of a larger Karaoke machine.