Senior Project Confirmation Memo
Active Noise Cancellation System
(anc)

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Project Description:

Adaptive filter is broadly used in interference cancellation, prediction, inverse modeling and identification. The goal of this project is to design and implement an adaptive filtering system to perform active noise cancellation. It includes adaptive filtering simulation, hardware implementation, and system verification using experimental data. A digital signal processing platform board from Lyrtech will be used for hardware implementation. It includes a Texas Instruments' TMS320C6713 DSP chip and a Xilinx FPGA Virtex-II device. Software packages such as MATLAB/Simulink, Xilinx system generator, and TI coder composer will be used to program the board and realize the system.