

# Colt Nichols

Analysis of Low Cost Wearable Biomedical Devices  
as a Method for Disease Prevention

Majors: Biomedical Engineering & Electrical Engineering  
Minor: Mathematics

This thesis is a culmination of my experience in Biomedical and Electrical Engineering. Continuous advancements in electronics have made the use of wearable electronics increasingly available to the average person. The practicality of producing wearable biomedical devices, has improved both tremendously both financially and in usability. I will analyze the technologies in development and currently available in the interest of identifying prospective applications. The goal of this thesis is to provide an interdisciplinary analysis on the option of wearable biomedical devices. In particular, I will evaluate their ability to improve the quality and timeliness of personal biometric information. The development of these services would greatly improve societal ability to prevent disease. This topic is more relevant than in previous times, considering the massively disruptive Covid-19 pandemic currently at hand