### **Thesis Project Portfolio**

# Analyzing Candidates for Home Electronic Incarceration on Return-to-Custody Rates for Inmates

(Technical Report)

## Efficacy And Ethicality of Home Electronic Incarceration for Regional Jails

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science
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In Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

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# **Table of Contents**

Sociotechnical Synthesis
Analyzing Candidates for Home Electronic Incarceration on Return-to-Custody Rates for Inmates
Efficacy And Ethicality of Home Electronic Incarceration for Regional Jails
Prospectus

### **Sociotechnical Synthesis**

My capstone research addresses a problem the Charlottesville-Albemarle judicial system and other related systems have concerning the efficacy surrounding Home Electronic Incarceration (HEI) as a solution to mass incarceration. The study hopes to evaluate HEI devices', also known as ankle monitors, impact on reducing incarceration rates, improving rehabilitation outcomes, and addressing ethical concerns with the criminal justice system.

It is important to consider the human and social dimensions of this technology because of the impacts HEI could or could not have on individuals within the criminal justice system, governmental policies, community dynamics, as well as ethical considerations. Thomas Hughes's theory of technological momentum and Angela Davis's ethical framework for prison reform were used to guide the problem-solving approach and implications of HEI adoption.

My research employed a qualitative approach, involving stakeholder interviews, data collection from relevant agencies and institutions, and ethical analysis of HEI. The study uncovered insights into the societal impacts of HEI implementation, including its effects on rehabilitation, recidivism rates, and community integration.

The research assessed that HEI is an effective and ethical solution to reducing incarceration rates, mitigating overcrowding in correctional facilities, and promoting successful reintegration into society. Additionally, the study identified other ethical considerations surrounding HEI implementation, including issues of gender and abuse, quality of life, and equity within the criminal justice system.

Implications of this thesis extend beyond the immediate context of the Charlottesville-Albemarle judicial system, informing broader discussions on criminal justice reform, technological innovation, and social responsibility. By critically examining the intersection of technology and society within the realm of criminal justice, this research aims to contribute to more informed policymaking and promote equitable and effective solutions to mass incarceration.