

# Assessing the Vulnerabilities of Bluetooth Communication

Brian Mhatre

February 2024

## 1 Problem

Bluetooth Low Energy is a low cost a easy to implment technology that enables effecient communication between small devices. Despite its widespread use, it is susceptibility to security breaches such as spoofing and unauthorized access raises substantial concerns. Studies refernced in the refernced papers illustrate various attack vectors, including exploitation of flaws in BLE's authentication processes and the potential for attackers to impersonate legitimate devecies. These vulnerabilities not only compromise the integrity and privacy of data exchanged between devices but also pose risks to users' security, expecially in applications involving sensitive information such as health monitoring devices. Our proposed project will involve researching the vulnerabilities in BLE, implmenting a specific hack and finnaly researching new security measures used to safegaurd the Internet of Things infastructure against potential attacks.

## 2 Project Timeline

## 3 Team Member Roles