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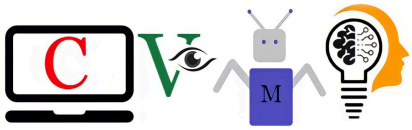

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Secured Home Automation with Voice Recognition Using ML and IoT Devices

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Abstract:
In home, We utilize Gaussian Mixture Model to train voice recognition, and subsequently implement it in Internet of Things devices. We utilize these machine learning frameworks to enhance the precision, adaptability, and robustness of the system in order to mitigate security breaches. Hence, the main objective of the study is to develop a secure authentication system that is on one hand is more precise and on its other is user-friendly, with speech recognition playing a significant role to develop a next level home automation technologies.

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I. Introduction

In computer science, the burgeoning field of smart house technology—also referred to as smart home automation—has seen significant expansion and change in recent years. High-end technology used in smart home automation allows it to automatically start fa[Sign in to Continue Reading] other things. It not only offers convenience and security but also productivity to homeowners. The goal of this project is to use machine learning to integrate with voice recognition from speakers into the home automation system.

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