基于视觉物联网技术的门禁系统设计与实现

摘要

在人工智能不断发展的新科技时代中，人们的生活习惯开始不断偏向方便快捷的智慧生活，这也就导致了门禁系统不断地向高科技高水平的智能方向不断发展。然而由于每个人脸面部的不同特征导致把人脸应用在门禁系统成为了一个新的研究发展方向。我们知道人脸识别在很多地方已经有了非常成熟的应用包括手机的智能解锁，付款等。但是在门禁中人脸表情包括多人的通过和是否佩戴眼镜等的影响。都会导致识别人脸的准确度。

本文主要针对人脸识别的几个关键过程进行研究，其中包括人脸的图像的检测过程到面部特征的提取，再到与本地人脸数据库的比对从而达到身份的验证，利用数据库来管理人脸数据和实现人脸数据的可视化。

关键词：人脸识别，门禁系统

Design and Implementation of Access Control System Based on Visual Internet of Things Technology

Abstract: In the era of new technology in which artificial intelligence is constantly evolving, people ’s living habits are beginning to favor convenient and efficient smart life, which has led to the continuous development of access control systems towards high-tech and high-level intelligence. However, due to the different characteristics of each face and face, it has become a new research and development direction to apply the face to the access control system. We know that face recognition already has very mature applications in many places, including smart phone unlocking, payment, etc. However, facial expressions in access control include the influence of the passage of multiple people and whether to wear glasses. Will lead to the accuracy of face recognition.

This article focuses on the research of several key processes of face recognition, including the detection process of face images to the extraction of facial features, and then the comparison with the local face database to achieve identity verification, using the database to manage people Face data and visualization of face data.

Key words: face recognition, access control system